

From: Gregory A Menz/BASF-CATALYSTS/BASF
To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, William D Deisenroth/BASF-CATALYSTS/BASF@BASF

Date: 10/14/2015 12:50 PM Subject: PK Blender Coating

Bill/Leon,

Attached is the quote on having the inside of our bldg 9 PK Blender re-coated. Let me know whether we want to have it done or not.

Thank You,

# **Gregory Menz**

Maintenance Supervisor

Phone: 440-329-2538, Mobile: 440-328-7173

Postal Address: BASF, 120 Pine Street, Elyria, OH 44035

#### **BASF - The Chemical Company**

---- Forwarded by Gregory A Menz/BASF-CATALYSTS/BASF on 10/14/2015 12:47 PM ----

From: <Greg\_Groff@Praxair.com> To: <gregory.menz@basf.com> Date: 10/13/2015 04:36 PM Subject; Re; Coating Request

Gregory,

Good afternoon. I hope things are going well for you. Please find attached Praxair Surface Technologies (PST) quote for (1) Double Cone Blender for recoating. PST prefers that BASF remove the old coating prior to sending to PST for recoating. I have provided the Option for SermaShield - HC as well. Let me know if there is anything else you need. I look forward to working with you and BASF on this project.

Thanks and Kindest Regards,

Greg Groff
Account Manager
Praxair Surface Technologies
7615 Fairview Street
Houston, TX 77041
greg\_groff@praxair.com
(443) 831-1536

This e-mail, including any attachments, is intended solely for the person or entity to which it is addressed and may contain confidential, proprietary and/or non-public material. Except as stated above, any review, re-transmission, dissemination or other use of, or taking of any action in reliance upon this information by persons or entities other than an intended recipient is prohibited. If you receive this in error, please so notify the sender and delete the material from any media and destroy any printouts or copies.

From:

<gregory.menz@basf.com>
<greg\_groff@praxair.com>,

To: Date:

10/08/2015 11:02 AM

Subject:

Coaling Request

## Greg,

Back in 2006 Sermatech coated a blender for Engelhard Corporation (Sermatech Quote #: 2006.37.0002). Since then Sermatech has been acquired by Praxair and Engelhard has been acquired by BASF.

We are considering having the blender re-coated again. Could you provide a quote on the cost to have the exact same job done again?

Thank You,

### **Gregory Menz**

Maintenance Supervisor

Phone: 440-329-2538, Mobile: 440-328-7173

Postal Address: BASF, 120 Pine Street, Elyria, OH 44035

BASF - The Chemical Company (See attached file: 2015.101315-4FP BASF Gregory Menz for a PK Double Cone Blender with 40 mils of SermaShield-300 GSC-C plue Exterior Paint 10.13.15.doc)



From: Stefan J Niewiadomski/BASF-CATALYSTS/BASF To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Cc: Brian Beller/NA/BASF@BASF, Andrew Myers/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@BASF Date: 09/23/2015 02:12 PM Subject: Re: PK Blender

(See attached file: pk2.xlsx)

Sorted as best as possible. Functional location sort did not make as much sense.

### Stefan Niewiadomski

Mobile: +1-440-319-2130 E-Mail: stefan.niewiadomski@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

# 150 years

**BASF** - We create chemistry

Leon Zavodnik---09/23/2015 09:01:16 AM---Steve, can you sort by valve, lining, end seals etc and resend so it's easier to view.

From: Leon Zavodnik/BASF-CATALYSTS/BASF
To: Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF
Co: Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF
Co: Brian Beller/NA/BASF@BASF, Andrew Myers/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF
CATALYSTS/BASF@BASF
Date: 09/23/2015 09:01 AM
Subject: Re: PK Blender

Steve,

can you sort by valve, lining, end seals etc and resend so it's easier to view.

Regards, **Leon Zavodnik** Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years BASF - We create chemistry

Stefan J Niewiadomski---09/21/2015 07:52;31 AM---Stefan Niewiadomski Mobile; +1-440-319-2130 E-Mail: stefan.niewiadomski@basf.com

From: Stefan J Niewiadomski/BASF-CATALYSTS/BASF To: Brian Beller/NA/BASF@BASF

Cc: Andrew Myers/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF-CATALYSTS/BASF

CATALYSTS/BASF@BASF Date: 09/21/2015 07:52 AM Subject: Re: PK Blender

[attachment "pk.xlsx" deleted by Leon Zavodnik/BASF-CATALYSTS/BASF]

#### Stefan Niewiadomski

Mobile: +1-440-319-2130 E-Mail: stefan.niewiadomski@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years BASF - We create chemistry

<sup>5</sup> Brian Beller---09/18/2015 05:55:44 PM---Steve, Leon and I were talking tonight and it seems that we are having quite a few break downs on th

From: Brian Beller/NA/BASF

To: Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF

Cc: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Andrew Myers/NA/BASF@BASF, Brian

Beller/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Date: 09/18/2015 05:55 PM

Subject: PK Blender

#### Steve

Leon and I were talking tonight and it seems that we are having quite a few break downs on the PK. Can you pull the records and let us know how many times it has been down for say the last 9 months and what items were repaired to take care of the issues.

Thanks Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

2

150 years BASF - We create chemistry

Plant section	Main WorkCtr	Created by	Notification Order		Priority	Notifictn type DISCHARG	
SCT	MECH	BELLERB	934678600		2	UM	
SCT	MECH	VANDERTM	934837721	805893326	1	UM	
SCT	MECH	SCOGGIR2	934848500	805898366	1	UM	
SCT	MECH	SULLENK	934850260	805899188	3	UM	
SCT	MECH	SULLENK	934899850	805923410	2	UM	
SCT	MECH	BELLERB	934942334	805944274	1	ÚM	
SCT	MECH	URIGR	934945087	806052715	2	UM	
SCT	MECH	\$COGGIR2	934953071	805947600	1	UM	
SCT	MECH	VANDERTM	934956244	805947636	1	UM	
SCT	MECH	SCHLUTL	934973981	805958549	i	UM	
SCT	MECH	SCOGGIR2	934998276	805973750	1	UM	
SCT	MECH	BELLERB	935028737	805984664	1	UM	
SCT	MECH	BELLERB	935178174	806058871	i 1	UM	
SCT	MECH	MYERSAN	935280579	806106437	i	UM	
				- 2000 - 2000 666		ENDS	
SCT	MECH	SCOGGIR2	934969776	805955307	1	UM	
SCT	MECH	VANDERTM	934976084	805959422	i	UM	
SCT	MECH	SCOGGIR2	934976176	805959633	1	UM	
SCT	MECH	BELLERB	934978891	805960983	1	UM	
SCT	MECH	VANDERTM	935017605	805977456	1	UM	
SCT	MECH	SCOGGIR2	935261769	806097850	1	UM	
					i kar	PUME	
SCT	MECH	BELLERB	934936034	805942743	1	UM	
SCT	MECH	BELLERB	934941710	805942592	1	UM	
SCT	MECH	VANDERTM	934943775	805944241	1	UM	
SCT	MECH	VANDERTM	934963704	805952199	1	UM	
SCT	MECH	BELLERB	935045475	805991864	1	UМ	
SCT	MECH	VANDERTM	935265950	806101908	1	UM	
SCT	MECH	SCOGGIR2	935267409	806101761	1	UM	
REPORT IN		1 0 00 000 00 00 000 000 000 000 000 00				MISCELL	
SCT	MECH	VANDERTM	935228317	806083208	1	UM	
SCT	MECH	MYERSAN	935278099	806105482	1	UM	
SCT	MECH	BELLERB	934676105	805819638	2	UM	
SCT	OPER	BELLERB	934755766	805852859	2	UM	
SCT	OPER	BELLERB	934812469	805898386	2	UM	
SCT	MECH	BELLERB	934896646	805947989	3	UМ	
SCT	MECH	VANDERTM	935043040	805990085	1	UM	

Description SE VALVE	Functional Loc.	Created on
PK discharge valve rheostat switch broke	UTEL-CAT-BDG9-M-R-58712001	01/10/2015
PK blender discharge valve	UTEL-CAT-BDG9-M-N-387 12001 UTEL-CAT-BDG9-C-B-58735100	03/13/2015
Discharge valve tote pump for PK	UTEL-CAT-BDG9-M-R-58702007	03/18/2015
add solenoid valves for PK blenders	UTEL-CAT-BDG9-M-R-58712001	03/18/2015
Replace actuator on pk blender	UTEL-CAT-BDG9-M-R-58712001	04/09/2015
PK Discharge valve issues.	UTEL-CAT-BDG9-M-R-58712001	04/27/2015
Adjust South PK Valve	UTEL-CAT-BDG9-M-R-58712001	04/28/2015
PK outlet valve actuator loose	UTEL-CAT-BDG9-M-R-58712001	05/02/2015
pk discharge valve stuck closed now	UTEL-CAT-BDG9-C-B-58735100	05/04/2015
Discharge valve not working PK	UTEL-CAT-BDG9-M-R-58712001	05/11/2015
PK Blender outlet valve	UTEL-CAT-BDG9-M-R-58712001	05/23/2015
PK Blender Discharge valve not working	UTEL-CAT-BDG9-M-R-58712001	06/05/2015
PK Discharge valve leaking	UTEL-CAT-BDG9-C-B-58735100	08/05/2015
South PK Blender Discharge Valve Leaking	UTEL-CAT-BDG9-M-R-58712001	09/18/2015
EALS	3.22 3,11 BB 3 11 11 12 13 13 13 13 13 13 13 13 13 13 13 13 13	
PK Blender both end seals leaking	UTEL-CAT-BDG9-M-R-58712001	05/11/2015
pk solution line leaking	UTEL-CAT-BDG9-M-R-58712001	05/12/2015
PK west end seal leaking bad	UTEL-CAT-BDG9-M-R-58712001	05/13/2015
PK blender west end seal leaking	UTEL-CAT-BDG9-C-B-58735100	05/14/2015
end seals on pk blender	UTEL-CAT-BDG9-C-B-58735100	05/31/2015
PK blender east end seal	UTEL-CAT-BDG9-M-R-58712001	09/10/2015
ING		
PK Blender air pump from weigh tank	UTEL-CAT-BDG9-M-R-58702003	04/25/2015
PK Blender air pump from weigh tank	UTEL-CAT-BDG9-M-R-58702003	04/27/2015
pk solution pump leaking	UTEL-CAT-BDG9-M-R-58702003	04/28/2015
chrome tote pump/PK blender	UTEL-CAT-BDG9-M-R-58702003	05/07/2015
PK Blender Transfer pump to PK leaking	UTEL-CAT-BDG9-M-R-58702003	06/12/2015
need pk solution pump replaced	UTEL-CAT-BDG9-M-R-58702003	09/12/2015
PK blender solution pump	UTEL-CAT-BDG9-M-R-58702003	09/14/2015
ANEOUS		
Pk blender cap	UTEL-CAT-BDG9-M-R-58712001	08/27/2015
Put new shower caps on PK Blender	UTEL-CAT-BDG9-M-R-58712001	09/17/2015
Pk Blender tote pump station wand	UTEL-CAT-BDG9-M-R-58702007	01/09/2015
SJN - Pk Blender top hatch rework	UTEL-CAT-BDG9-M-R-58712001	02/06/2015
SJN - Safety- Retaining ring - PK Lid	UTEL-CAT-BDG9-M-R-58712001	03/02/2015
Install indacator light for PK DC drum	UTEL-CAT-BDG9-C-B-58735100	04/08/2015
pk day tank solution valve from	UTEL-CAT-BDG9-M-V-58701002	06/11/2015

Plant section	Main WorkCtr	Created by	Notification	Order	Priority	Notifictn type		Functional Loc.	Created on
SCT	MECH	BELLERB	934678600	vine said to the state of the s	2	UM	PK discharge valve rheostat switch broke	UTEL-CAT-BDG9-M-R-58712001	01/10/2015
SCT	MECH	VANDERTM	934837721	805893326	1	UM	PK blender discharge valve	UTEL-CAT-BDG9-C-B-58735100	03/13/2015
SCT	MECH	SCOGGIR2	934848500	805898366	4	ŬМ	Discharge valve tote pump for PK	UTEL-CAT-BDG9-M-R-58702007	03/18/2015
SCT	MECH	SULLENK	934850260	805899188	3	UM	add solenoid valves for PK blenders	UTEL-CAT-BDG9-M-R-58712001	03/18/2015
SCT	MECH	SULLENK	934899850	805923410	2	ŬM	Replace actuator on pk blender	UTEL-CAT-BDG9-M-R-58712001	04/09/2015
SCT	MECH	BELLERB	934942334	805944274	1	UM	PK Discharge valve issues.	UTEL-CAT-BDG9-M-R-58712001	04/27/2015
SCT	MECH	URIGR	934945087	806052715	2	UM	Adjust South PK Valve	UTEL-CAT-BDG9-M-R-58712001	04/28/2015
SCT	MECH	SCOGGIR2	934953071	805947600	7	UM	PK outlet valve actuator loose	UTEL-CAT-BDG9-M-R-58712001	05/02/2015
SCT	MECH	VANDERTM	934956244	805947636	4	UM	pk discharge valve stuck closed now	UTEL-CAT-BDG9-C-B-58735100	05/04/2015
SCT	MECH	SCHLUTL	934973981	805958549	4	UM	Discharge valve not working PK	UTEL-CAT-BDG9-M-R-58712001	05/11/2015
SCT	MECH	SCOGGIR2	934998276	805973750	4	UM	PK Blender outlet valve	UTEL-CAT-BDG9-M-R-58712001	05/23/2015
SCT	MECH	BELLERB	935028737	805984664	4	UM	PK Blender Discharge valve not working	UTEL-CAT-BDG9-M-R-58712001	06/05/2015
SCT	MECH	BELLERB	935178174	806058871	4	ŲM	PK Discharge valve leaking	UTEL-CAT-BDG9-C-B-58735100	08/05/2015
SCT	MECH	MYERSAN	935280579	806106437	4	UM	South PK Blender Discharge Valve Leaking	UTEL-CAT-BDG9-M-R-58712001	09/18/2015
301	MECH	MILENSAN	935260379	000100437			SEALS	01EL-CA1-BDG9-M-R-36712001	09/18/2013
SCT	MECH	SCOGGIR2	934969776	805955307	4	UM	The second secon	UTEL-CAT-BDG9-M-R-58712001	05/11/2015
SCT					4	_	PK Blender both end seals leaking		
	MECH	VANDERTM	934976084	805959422	1	UM	pk solution line leaking	UTEL-CAT-BDG9-M-R-58712001	05/12/2015
SCT	MECH	SCOGGIR2	934976176	805959633	1	UM	PK west end seal leaking bad	UTEL-CAT-BDG9-M-R-58712001	05/13/2015
SCT	MECH	BELLERB	934978891	805960983	1	UM	PK blender west end seal leaking	UTEL-CAT-BDG9-C-B-58735100	05/14/2015
SCT	MECH	VANDERTM	935017605	805977456	1	UM	end seals on pk blender	UTEL-CAT-BDG9-C-B-58735100	05/31/2015
SCT	MECH	SCOGGIR2	935261769	806097850		UM	PK blender east end seal	UTEL-CAT-BDG9-M-R-58712001	09/10/2015
					المتعرضات	PUM	e a la companya de l		MOTELL -
SCT	MECH	BELLERB	934936034	805942743	1	UM	PK Blender air pump from weigh tank	UTEL-CAT-BDG9-M-R-58702003	04/25/2015
SCT	MECH	BELLERB	934941710	805942592	1	UM	PK Blender air pump from weigh tank	UTEL-CAT-BDG9-M-R-58702003	04/27/2015
SCT	MECH	VANDERTM	934943775	805944241	1	UM	pk solution pump leaking	UTEL-CAT-BDG9-M-R-58702003	04/28/2015
SCT	MECH	VANDERTM	934963704	805952199	1	UM	chrome tote pump/PK blender	UTEL-CAT-BDG9-M-R-58702003	05/07/2015
SCT	MECH	BELLERB	935045475	805991864	1	UM	PK Blender Transfer pump to PK leaking	UTEL-CAT-BDG9-M-R-58702003	06/12/2015
SCT	MECH	VANDERTM	935265950	806101908	1	UM	need pk solution pump replaced	UTEL-CAT-BDG9-M-R-58702003	09/12/2015
SCT	MECH	SCOGGIR2	935267409	806101761	1	UM	PK blender solution pump	UTEL-CAT-BDG9-M-R-58702003	09/14/2015
		5/86/5/4/				MISCELL	ANEOUS		
SCT	MECH	VANDERTM	935228317	806083208	1	UM	Pk blender cap	UTEL-CAT-BDG9-M-R-58712001	08/27/2015
SCT	MECH	MYERSAN	935278099	806105482	1	UM	Put new shower caps on PK Blender	UTEL-CAT-BDG9-M-R-58712001	09/17/2015
SCT	MECH	BELLERB	934676105	805819638	2	UM	Pk Blender tote pump station wand	UTEL-CAT-BDG9-M-R-58702007	01/09/2015
SCT	OPER	BELLERB	934755766	805852859	2	UM	SJN - Pk Blender top hatch rework	UTEL-CAT-BDG9-M-R-58712001	02/06/2015
SCT	OPER	BELLERB	934812469	805898386	2	UM	SJN - Safety- Retaining ring - PK Lid	UTEL-CAT-BDG9-M-R-58712001	03/02/2015
SCT	MECH	BELLERB	934896646	805947989	3	UM	Install indacator light for PK DC drum	UTEL-CAT-BDG9-C-B-58735100	04/08/2015
SCT	MECH	VANDERTM	935043040	805990085	1	UМ	pk day tank solution valve from	UTEL-CAT-BDG9-M-V-58701002	06/11/2015



From: Andrea Bal/NA/BASF
To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF
Cc: Kirk Sullenberger/BASF-CATALYSTS/BASF@BASF
Date: 11/10/2015 09:56 AM

Subject: Change Management 0084-SOPS-15-0150: Submitted

Change Management 0084-SOPS-15-0150 (Install flow meter on day tank discharge line to PK Blender) has been submitted and is now available for your approval.

Please click on the link below to view the document.

(]

# REDACTED

From: Tim Anglin/EB-NAFTA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Date: 10/19/2015 10:34 AM

Subject: Re: AIM Report 0084-SOPS-15-0148

PK Blender

Low scubber pressure drop readings

7/31, 8/2 and 8/3

Leon Zavodnik---10/17/2015 05:15:09 PM---Tim, Please give me these deviations since I do not have them listed. The days and numbers would hel

From: Leon Zavodnik/BASF-CATALYSTS/BASF To: Tim Anglin/EB-NAFTA/BASF@BASF

Date: 10/17/2015 05:15 PM

Subject: AIM Report 0084-SOPS-15-0148

Tim

Please give me these deviations since I do not have them listed. The days and numbers would help

Regards, **Leon Zavodnik** Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years

1

# **BASF - We create chemistry**

Please click on the link below to open report: 0084-SOPS-15-0148

**(**),



From: Andrea Bal/NA/BASF
To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF
Cc: Robert Urig/BASF-CATALYSTS/BASF@BASF
Date: 09/08/2015 09:52 AM
Subject: PK Blender Liner

Hi All,

Attached are some pictures of the PK Blender liner. Rob will also be sending some more out.

(See attached file: IMG\_0241.JPG)(See attached file: IMG\_0240.JPG)(See attached file: IMG\_0239.JPG)(See attached file: IMG\_0235.JPG)

Based on the liner's status, do we want to try to still run Catoxid impregnations? The last update from maintenance on getting someone out here to fix it was Thursday or Friday. Then we would probably need to wait 24-48 hours for the new liner to cure, pushing start-up to the weekend at the earliest

If we run batches now until the liner can be fixed, we could possibly make enough to hold over the calciner while the PK is down getting fixed, but we risk the PK being damaged further. We have already lost 4+ days on the blender and 3+ on RC5.

Thoughts?

Best Regards, Andrea

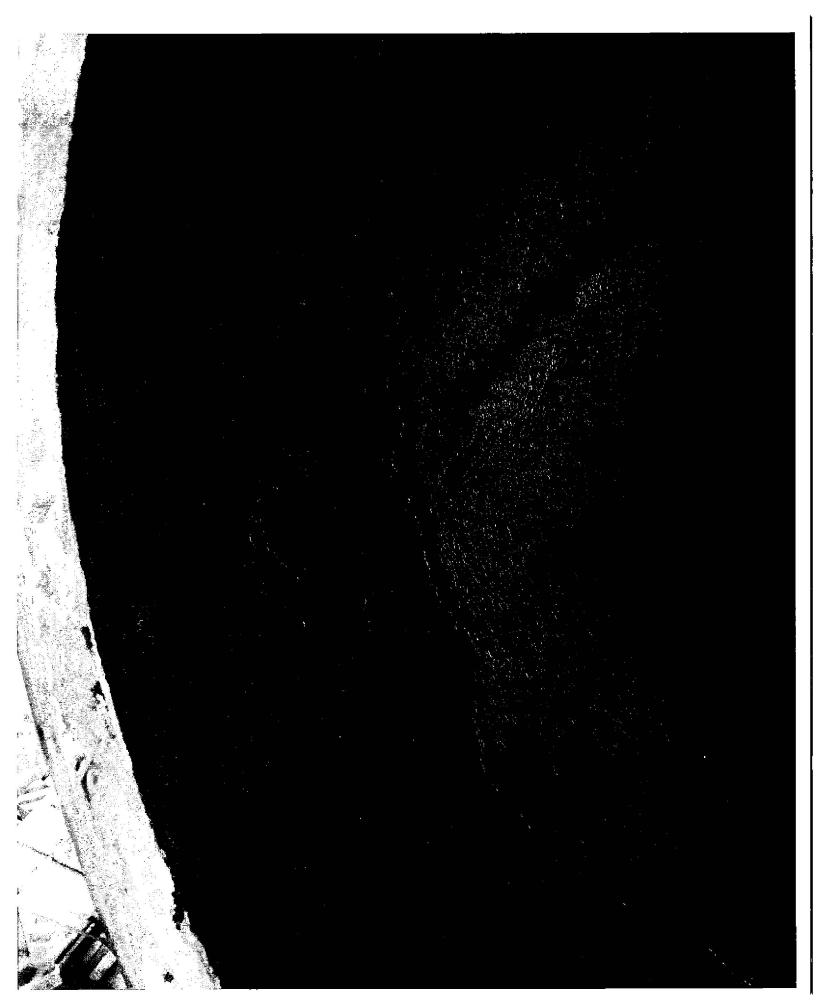
# Andrea Bal

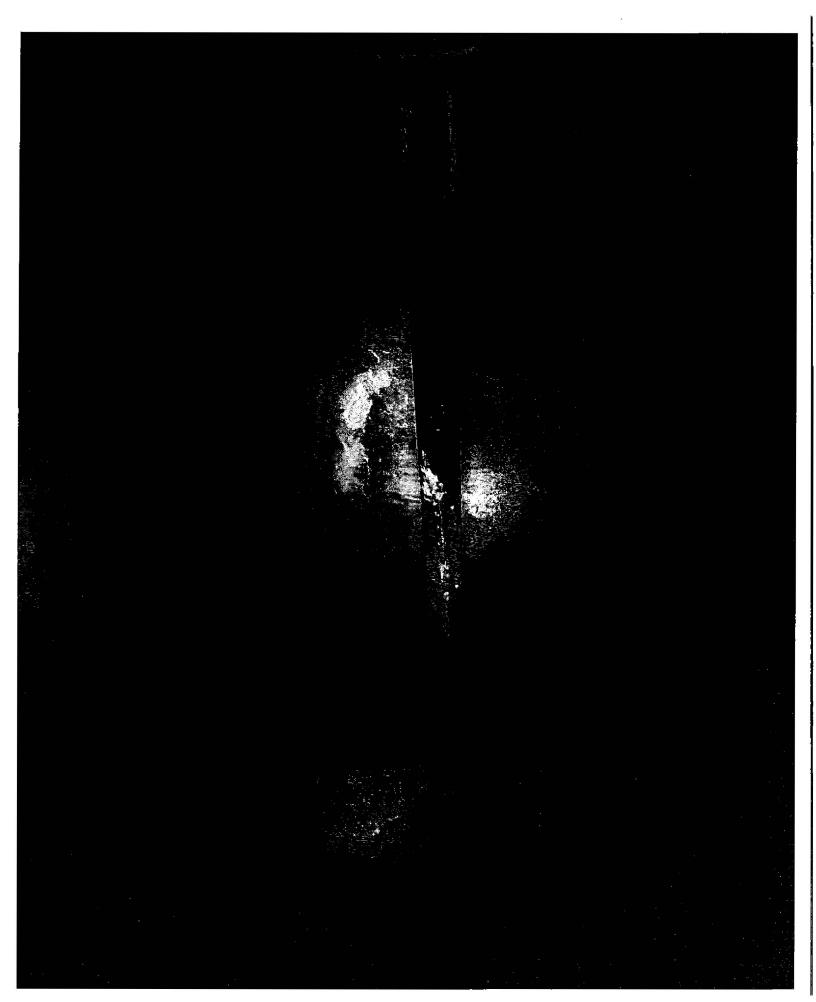
Production Engineer

Phone: +1 440-329-2549 Mobile: 440-225-4182 E-Mail: andrea.bal@basf.com Postal Address: BASF Corporation, 120 Pine St., Elyria, OH 44035, USA

150 years BASF - We create chemistry











From: Stefan J Niewiadomski/BASF-CATALYSTS/BASF

To: Brian Beller/NA/BASF@BASF

Cc: Andrew Myers/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@BASF Date: 09/21/2015 07:52 AM Subject: Re: PK Blender

(See attached file: pk.xlsx)

#### Stefan Niewiadomski

Mobile: +1-440-319-2130 E-Mail: stefan.niewiadomski@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

#### 150 years

**BASF** - We create chemistry

Figure 1. Beller---09/18/2015 05:55:44 PM---Steve, Leon and I were talking tonight and it seems that we are having quite a few break downs on th

From: Brian Beller/NA/BASF

To: Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF

Cc: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Andrew Myers/NA/BASF@BASF, Brian

Beller/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Date: 09/18/2015 05:55 PM

Subject: PK Blender

#### Steve,

Leon and I were talking tonight and it seems that we are having quite a few break downs on the PK. Can you pull the records and let us know how many times it has been down for say the last 9 months and what items were repaired to take care of the issues.

1

# Thanks Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

150 years BASF - We create chemistry



From: Robert Scoggins/NA/BASF

To: Dateesha Cavin/NA/BASF@BASF

Cc: Abdallah Ahmed/NA/BASF@MSO365, Brian Beller/NA/BASF@BASF, David D Hritsko/NA/BASF@BASF, Kathy Royle/PARTNERS/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Thomas Copa/NA/BASF@BASF, Valerie

Topete/NA/BASF@BASF Date: 09/14/2015 12:20 AM

Subject: Re: Please read IH monitoring for 14 Sept 2015

#### Dateesha/Kathy,

Do not schedule IH monitoring for the PK on Monday. The make-up tank solution pump is not functioning and will need maintenance on Monday. Work order submitted.

If the PK lining repairs are to commence this Tuesday, then IH monitoring will have to wait until that work is completed. Please check with Mike Vanderbosch and Andrew Myers for an update.

Thanks, Rob

Dateesha Cavin--09/11/2015 04:42:35 PM--Hello Kathy, There will be IH Monitoring for Cr+6 Monday, 14 Sept 2015 for the following:

From: Daleesha Cavin/NA/BASF

To: Kathy Royle/PARTNERS/NA/BASF@BASF, Thomas Copa/NA/BASF@BASF, David D Hritsko/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF

Cc: Valerie Topote/NA/BASF@BASF, Abdallah Ahmed/NA/BASF@MSO365, Leon Zavodnik/BASF-CATALYSTS/BASF

Date: 09/11/2015 04:42 PM

Subject: Please read IH monitoring for 14 Sept 2015

Hello Kathy,

There will be IH Monitoring for Cr+6 Monday, 14 Sept 2015 for the following:

# Southend

PK Blender Operator - Catoxid PK Blender Area - Catoxid

# Northend

APV Operator - Cu 1819 APV Area - Cu 1819 Calciner Operator - Cu 1820 Calciner Area - Cu 1820

Please have the Northend operators meet Kathy Royle by the North end PPE area at 6:45 am and the Southend operators meet in the 1st floor Gen Cat Lab area at 7 am.

If for some reason the plant it shut down or machines can not run, please contact Kathy and me.

Thank you

# Dateesha Cavin

EHS Specialist, Central Hub

Phone: +1-440-329-2596 Mobile: +1-440-420-3439 E-Mail: dateesha.cavin@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years BASF - We create chemistry

Some respond by looking at how it can't be done while the champion looks at how it can be done. The champion has one option and that's to only believe.

I believe we are all Champions created to do Great things!!!



From: Matthew Willbond/BASF-CATALYSTS/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

To: Leon Zavounin/BASF-CATALTSTS/BASF@BASF
Cc: Art Hribar/BASF-CATALTSTS/BASF@BASF, Stefan J Niewladomski/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASFCATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Andrew Myers/NA/BASF@BASF, Andrea Bal/NA/BASF@BASF,
Noemi Trent/BASF-CATALYSTS/BASF@BASF, Robert Urig/BASF-CATALYSTS/BASF@BASF-CORP, William D Deisenroth/BASF-CATALYSTS/BASF@BASF,
Gregory A Menz/BASF-CATALYSTS/BASF@BASF, Lee McClish/NA/BASF@BASF

Date: 09/09/2015 08:31 AM

Subject: RE: 806092508 PK blender liner repair

Okay, Let me know ASAP so I can lock them in to a date next week...

#### **Matthew Willbond**

Maintenance Planner

Phone: 440-329-2503 Fax: 440-329-2406 E-Mail: matthew.willbond@basf.com

Postal Address: BASF Corporation, 120 Pine St., Elyria, Ohio 44035

150 years

**BASF** - We create chemistry

Leon Zavodnik---09/09/2015 06:56:32 AM---Monday would be OK but I may want to push off a day based on how last night and today went. Andrea c

From: Leon Zavodnik/BASF-CATALYSTS/BASF

To: Malthew Willbond/BASF-CATALYSTS/BASF@BASF

Cc: Art Hribar/BASF-CATALYSTS/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Andrew Myers/NA/BASF@BASF, Andrea Bal/NA/BASF@BASF,

Noemi Trent/BASF-CATALYSTS/BASF@BASF, Robert Urig/BASF-CATALYSTS/BASF@BASF

Date: 09/09/2015 06:56 AM

Subject: RE: 806092508 PK blender liner repair

Monday would be OK but I may want to push off a day based on how last night and today went. Andrea can help coordinate repair timing based on how it is going.

Andrea please work with all to determine repair and chrome testing timing

Regards, **Leon Zavodnik** Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years BASF - We create chemistry

Matthew Willbond---09/08/2015 03:00:49 PM---Leon, GEREDCO can schedule us for the 14th to start recoating the south PK. Is this a good date

From: Matthew Willbond/BASF-CATALYSTS/BASF
To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF
Date: 09/08/2015 03:00 PM
Subject: RE: 806092508 PK blender liner repair

Leon,

GEREDCO can schedule us for the 14th to start recoating the south PK. Is this a good date or push off? The PK will need a good wash and blanked off for this work.

# **Matthew Willbond**

Maintenance Planner

Phone: 440-329-2503 Fax: 440-329-2406 E-Mail: matthew.willbond@basf.com

Postal Address: BASF Corporation, 120 Pine St., Elyria, Ohio 44035

150 years

**BASF** - We create chemistry

Geredco ---09/08/2015 12:30:06 PM---Matt I have you down for Monday, 9-14. If something changes I will let

From: Geredco@windstream.net>

To: "Matthew Willbond" <matthew.willbond@basf.com>

Date: 09/08/2015 12:30 PM

Subject: RE: 806092508 PK blender liner repair

Matt

I have you down for Monday, 9-14. If something changes I will let you know.

Louise

From: Matthew Willbond [mailto:matthew.willbond@basf.com]

Sent: Friday, September 4, 2015 12:39 PM

To: geredco@windstream.net

Subject: 806092508 PK blender liner repair

Ed,

The South PK line was damaged again, it looks to be about a 2'x2' total area. When is the soonest you can schedule this repair?

order Euril 899995998	PK blender i	iner repai	r		
806092508 PK blender liner 09/04/2015 08:46:55 EST Bri Lining on PK blender is in contractor so that we can s running so let us know befo	an Beller (BELLE) need of repairs. chedule a repair	Pîease ge . We need :			y of
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# **Matthew Willbond**

Maintenance Planner

Phone: 440-329-2503 Fax: 440-329-2406 E-Mail: <a href="mailto:matthew.willbond@basf.com">matthew.willbond@basf.com</a> Postal Address: BASF Corporation, 120 Pine St. , Elyria, Ohio 44035

150 years

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From: John Bodmann/BASF-CATALYSTS/BASF To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF Date: 09/02/2015 01:32 PM Subject: Action Item 0084-SOPS-15-0165: Complete

Accident / Incident Action Item 0084-SOPS-15-0165 has been completed.

Action Item Description ---> Modify PK blender Operating procedure and batch sheets once new valve is installed

Please click on the link below to view the document.

**(**).



From: Brian Beller/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Kristen Kapul/NA/BASF@BASF, William Grodecki/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, William D Deisenrolh/BASF-CATALYSTS/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Kirk Sullenberger/BASF-CATALYSTS/BASF@BASF, Nohert Scoggins/NA/BASF@BASF, Andrew Myers/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Kirk Sullenberger/BASF-CATALYSTS/BASF@BASF, John E Peshek/NA/BASF@BASF, Mark Goodman/NA/BASF@BASF

Date: 08/09/2015 11:14 PM Subject: Weekend update

Kaput

Kirk

Bodmann

Grodecki

Weekend updated

#1 MED is down. They stopped making batches on day shift. We are loosing a lot of powder to the filter separator. We need to evaluate this again in the morning.

#1 calciner is feeding now, we have a few bags left on the floor.

#2 MED is holding, we had some issues making the trial batches and found that the cooling water was not plugged into one of the barrels. The last 2 batches had cooling water and ran good.

#2 Calciner is feeding the last of the trial batches made on Friday

#3 Med continues on

#3 Calciner continues. We had some contamination issues, there are 3 bags of material with odd color extrusions in them

by the red zone. John please take a look at these in the morning.

#4 Calciner is finished- We need to start cleaning but have not had the man power to do so,

#5 Calciner continues on.

#6 Calciner is running again. We are not seeing anything from the Sly Scrubber, and will continue to monitor. We need to address the issue of running this to the CTO to see what we need to do so that we are able to do this. It appears that maybe the damper valve to the CTO was disconnected when it was determined that we could not run 6 to the CTO. Kirk could you work on this?

East Pfaudler- We are continuing to make batches.

West Pfaudler- We did a great job over the weekend getting the Pfaudler turned around and the national back together. We are waiting for the lab to get back to us with the modifications we need to make on the solution tank, they were having some equipment issues this afternoon and were not able to run the sample. I am not able to locate any of the base material for this product on site. We should be ready to go in the morning as soon as we get the lab results back but we will need base.

#4 TK- They started loading on afternoons today. We still need to get the screener changed out and a lock removed from the DC unit. We also need to locate bag 7 of lot 114 to be topped off.

Belt filter continues to run. I am not sure how much longer we need to run but we will probably need more copper early in the week. I did a count on Saturday and it looks like we have enough to get us through Wednesday maybe Thursday barring any issues.

Towers- continue on

South screener- has 1 tote of DPT left.

Pill Machines- East is running ok and west is still being put together. I will have an update in the shift notes in the morning.

PK blender- we have run a few batches this weekend after the bags were inspected. No issues with any dusting out of the stack. We probably need to evaluate our process of when we need to shut off the DC while running batches if the DP is too high.

Thanks Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

150 years BASF - We create chemistry



From: Brian Beller/NA/BASE

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Kristen Kaput/NA/BASF@BASF, William Grodecki/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, William D Deisenroth/BASF-CATALYSTS/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, Matthew Willbond/BASF-CATALYSTS/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF@BASF, Kirk Sullenberger/BASF-CATALYSTS/BASF@BASF, Raymond Hazlerig/NA/BASF@BASF

Date: 06/05/2015 01:57 AM Subject: Maintenance Items

We have a few thing that will need to be fixed soon.

#5 burner issues- to be done on friday morning. calciner should be cool in time #5 control issues - need to be able to control from the control room - Kirk to deploy in the morning

PK blender discharge valve will not open. The Pfaudler is full of Catoxid impreg WO is in the system

#1 Mixer discharge valve is leaking. We need to get this seated better so that material will not leak out. WO is in the system

Nitric acid makeup system - We had to lock it out on wednesday to clean out the dike and no one unlocked it. We started it up tonight due to the tank on the third floor being MT, and it does not seem like the system is doing anything. Maybe have IMC take a look in the morning. #3 line is down due to it not working. WO is in the system

West Pfaudler- is now running. We had to take off the lid to reinstall the screen, someone used the incorrect zip ties again. They are now the correct ones, extras are in the Dewalt tool box.

East Horne machine is not running, the motor is making clunking sounds. WO is in the system West machine is being cleaned tonight. It is also having issues but is still running.

I am sure there will be more by morning.....

# Thanks Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

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From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF
To: \$EE\_Leadership\_Team, Tim Anglin/EB-NAFTA/BASF@BASF, Lance Neuschaefer/BASF-CATALYSTS/BASF@BASF, Kathy Fruner/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Thomas Copa/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Daniel Guzzi/NA/BASF@BASF, David D Hritsko/NA/BASF@BASF, Valerie Topete/NA/BASF@BASF, Nancy
Gallagher/NA/BASF@BASF, Datesha Cavin/NA/BASF@BASF
Cc: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF
Dale: 08/27/2015 12:13 PM

Subject: AIM 0084-SOPS-15-0121: Submitted

Accident Incident Report 0084-SOPS-15-0121 (Pk blender vented during the production of a batch of Catoxid.) has been submitted and is now available for your review.

Please click on the link below to view the document.

CONFIDENTIAL



From: Dean R Gadoury/NA/BASF

To: Sandy Kowaleski/NA/BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Abdallah Ahmed/NA/BASF@MSO365

Cc: Valerie Topete/NA/BASF@BASF, Daniel Guzzi/NA/BASF@BASF

Date: 05/07/2015 07:46 AM

Subject: Fw: AIM 0084-SOPS-15-0057: Submitted

This employee should probably be sent to the clinic for evaluation.

Regards, Dean Gadoury EHS Team Leader - Central Hub **Dean Gadoury** 

Phone: +1 440 329-2553 Mobile: +1-919-685-7267 Fax: +1 440 323-2430 E-Mail: dean.gadoury@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years BASF - We create chemistry

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---- Forwarded by Dean R Gadoury/NA/BASF on 05/07/2015 07:44 AM -----

From: Brian Beller/NA/BASF

To: \$EE\_Leadership\_Team, Tim Anglin/EB-NAFTA/BASF@BASF, Lance Neuschaefer/BASF-CATALYSTS/BASF@BASF, Kathy Fruner/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Thomas Copa/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Daniel Guzzi/NA/BASF@BASF, David D Hritsko/NA/BASF@BASF, Dean R Gadoury/NA/BASF@BASF, Theresa Mikula/BASF-CATALYSTS/BASF@BASF, Dateesha Cavin/NA/BASF@BASF, Nancy Gallagher/NA/BASF@BASF, Valerie Topete/NA/BASF@BASF CC: Brian Beller/NA/BASF@BASF

Date: 05/06/2015 10:06 PM

Subject: AIM 0084-SOPS-15-0057: Submitted

Accident Incident Report 0084-SOPS-15-0057 (Operator was exposed to chrome/aluminum dust while unloading the PK Blender) has been submitted and is now available for your review.

Please click on the link below to view the document.



From: Matthew Willbond/BASF-CATALYSTS/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Cc: Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF@BASF, Justin

Quach/NA/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@BASF Date: 05/29/2015 03:29 PM

Subject: scheduled to repair South PK lining on Monday, June 1.

Leon,

GEREDCO is now scheduled to repair South PK lining on Monday, June 1. Blender needs to be wash very well and dry please.

## **Matthew Willbond**

Maintenance Planner

Phone: 440-329-2503 Fax: 440-329-2406 E-Mail: matthew.willbond@basf.com

Postal Address: BASF Corporation, 120 Pine St., Elyria, Ohio 44035

150 years

BASF - We create chemistry

Leon Zavodnik---05/28/2015 09:11:50 PM---Matt, See below. When could we get someone in to fix the PK lining and how long would it take?

From: Leon Zavodnik/BASF-CATALYSTS/BASF

To: Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF

Cc: Brian Beller/NA/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, Noemi Trenl/BASF-

CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Mallhew Willbond/BASF-CATALYSTS/BASF@BASF, Mallhew Willbond/BASF-CATALYSTS

Date: 05/28/2015 09:11 PM

Subject: RE: PK lining

Matt.

See below. When could we get someone in to fix the PK lining and how long would it take?

Regards,

Leon Zavodnik

Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years

BASF - We create chemistry

Stefan J Niewiadomski—05/28/2015 06:39:19 PM---From: Stefan J Niewiadomski/BASF-CATALYSTS/BASF To: Leon Zavodnik/BASF-CATALYSTS/BASF@basf, Justin Quach/NA/BASF@basf

From: Stefan J Niewiadomski/BASF-CATALYSTS/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@basf, Justin Quach/NA/BASF@basf

Cc: Brian Beller/NA/BASF@basf, Noemi Trent/BASF-CATALYSTS/BASF@basf, Robert Scoggins/NA/BASF@basf, Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@basf, Gregory A Menz/BASF-CATALYSTS/BASF@basf

Date: 05/28/2015 06:39 PM Subject: RE: PK lining

You will have to check with Matt. He has been monitoring this,

Sent from my Windows Phone

From: Leon Zavodnik Sent: 5/28/2015 5:56 PM

To: Justin Quach

Cc: Brian Beller; Noemi Trent; Robert Scoggins; Stefan J Niewiadomski; Terrence M Vanderbosch; Gregory A

Menz; Stefan J Niewiadomski

Subject: Re: PK lining

Not yet. Do we have a work around until we can get enough ahead on pill mix and Catoxid as we are behind right now.

Can we put a different screen it to catch the flakes?

Greg...when can we get someone in to repair the PK lining and how long will it take?

Regards,

Leon Zavodnik

Operations Manager

Phone: +1 440 329-2592 Mobile; 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years

**BASF** - We create chemistry

Justin Quach---05/28/2015 01:47:10 PM---Leon, We are getting a lot of PK liner flaking off into the pillmix bags now and it is causing probl

From: Justin Quach/NA/BASF
To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF
Co: Noemi Trent/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF
Date: 05/28/2015 01:47 PM
Subject: PK lining

Leon,

We are getting a lot of PK liner flaking off into the pillmix bags now and it is causing problems with the machine making tablets. Is there plans to shut down and repair this at all soon? Thanks

Regards,

# Justin Quach

Process Engineer - Catalysts

Phone: +1 440 329-2501 Mobile: +1-440-822-9800 Fax: +1 440 329-2403 E-Mail: justin.quach@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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BASF Corporation - The Chemical Company



From: Brian Beller/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Kristen Kaput/NA/BASF@BASF, William Grodecki/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, Robert Urig/BASF-CATALYSTS/BASF@BASF

Cc: Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, William D Deisenroth/BASF-CATALYSTS/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, Matthew Willbond/BASF-CATALYSTS/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF@BASF

Date: 05/13/2015 09:55 PM

Subject: PK blender end seals leaking

We started up the PK blender on afternoon shift and the west end seal immediately started leaking powder. I had the operator shut it down and clean it out so maintenance can look at it in the morning. Work order is in the system.

Thanks Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

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From: Robert Scoggins/NA/BASF
To: Justin Quach/NA/BASF, John Bodmann/BASF-CATALYSTS/BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF, Brian Beller/NA/BASF
Cc: Leon Zavodnik/BASF-CATALYSTS/BASF, Art Hribat/BASF-CATALYSTS/BASF@BASF, Robert Urig/BASF-CATALYSTS/BASF@BASF, Stefan J
Niewiadomski/BASF-CATALYSTS/BASF, Matthew Willbond/BASF-CATALYSTS/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF

Subject: PK status

We will be finishing our last batch of pill mix by the end of midnight shift today, then per the instructions in the South Notes we will switch back to Catoxid. However, I have written a work order to have both end seals replaced on the blender - both are leaking. Just FYI...

Greg/Matt, if our mechanics are tied up please contact GEM for seal replacement (I am pretty sure they worked on the end seals before).

Mike, the midnight operator may not have a chance to rinse out the blender. Please schedule someone for this first thing to prep for the end seal work.

Thanks, Rob



From: Robert Scoggins/NA/BASF

<robert.urig@basf.com>, John Bodmann/BASF-CATALYSTS/BASF, Justin Quach/NA/BASF
Cc: Stefan J Niewiadomski/BASF-CATALYSTS/BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF, Brian Beller/NA/BASF, "William D Delsenroth"
<william.deisenroth@basf.com>

Date: 05/12/2015 07:23 PM

Subject: PK end seal (west) in terrible condition

Once again, cannot operate th PK. The outlet valve and solution transfer line issues were resolved earlier today, but the west end seal has a bad leak. I believe work was done on the seals, but something not right with the west. We will need to empty the blender and have it rinsed for seal repair. I will also have my operator this afternoon work on re-filling the chrome tank. Just fyi...

Rob

BASF\_114\_022716



From: Robert Scoggins/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF, Matthew Willbond/BASF-CATALYSTS/BASF@BASF

Cc: Terrence M Vanderbosch/BASF-CATALYSTS/BASF, Brian Beller/NA/BASF, John Bodmann/BASF-CATALYSTS/BASF, Justin Quach/NA/BASF

Date: 05/12/2015 01:37 AM Subject: PK Outlet Valve

A work order was written for the PK outlet valve. As the afternoon operator was preparing to make his Catoxid batch, it was quickly discovered that the valve was not holding the loaded Purolox. Prior to impregnating the batch, the Purolox was unloaded back into bags and the blender was rinsed out. There did not appear to be any significant obstruction...the valve simply would not hold.

It is my understanding that a replacement valve may be here on site, possibly arriving sometime last week. **Greg,** if that is the case can we have the valve changed out so we can continue Catoxid production?

Please advise, Rob



From: Justin Quach/NA/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF

Cc: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert

Scoggins/NA/BASF@BASF Date: 05/07/2015 11:40 AM Subject: Re: Pk batch sheets

I added the disconnect airlines to my batch sheets. The DC info was already on there. I'll drop off new batch sheets today. Thanks

Regards,

### **Justin Quach**

Process Engineer - Catalysts

Phone: +1 440 329-2501 Mobile: +1-440-822-9800 Fax: +1 440 329-2403 E-Mail: justin.quach@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

# 150 years

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John Bodmann---05/07/2015 11:07:18 AM---I will add the DC info to the catoxid batch sheet. The catoxid batch sheet already had the disconne

From: John Bodmann/BASF-CATALYSTS/BASF To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF Cc: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Justin

Quach/NA/BASF@BASF Date: 05/07/2015 11:07 AM Subject: Re: Pk batch sheets I will add the DC info to the catoxid batch sheet. The catoxid batch sheet already had the disconnect air lines step from the start of the campaign (I think we were doing pill mix when it was ripped off, though).

### John Bodmann

Production Engineer

Phone: 440-329-2540 Mobile: 440-452-2369 E-Mail: john.bodmann@basf.com Postal Address: BASF Corporation, 120 Pine Street, Elyria, OH 44035 USA

150 years

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Leon Zavodnik---05/07/2015 10:48:28 AM---Yes we do. I also want the batch sheets to be changed to note that we have to disconnect the air lin

From: Leon Zavodnik/BASF-CATALYSTS/BASF

To: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF

Cc: Brian Beller/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Justin Quach/NA/BASF@BASF

Date: 05/07/2015 10:48 AM Subject: Re: Pk batch sheets

Yes we do. I also want the batch sheets to be changed to note that we have to disconnect the air lines before we start blending to avoid continuing of ripping off the lines

Regards,

# Leon Zavodnik

Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years

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Terrence M Vanderbosch---05/07/2015 05:10:30 AM--- Did we want all of the batch sheets for the PK blender changed to have the operator check the dust

From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Brian

Beller/NA/BASE@BASE Date: 05/07/2015 05:10 AM Subject: Pk batch sheets

Did we want all of the batch sheets for the PK blender changed to have the operator check the dust collector pressure drop before starting? I know some of them have been changed.

--- Forwarded by Terrence M Vanderbosch/BASF-CATALYSTS/BASF on 05/07/2015 05:08 AM ----

From: TERRENCE.VANDERBOSCH@BASF.COM To: TERRENCE.VANDERBOSCH@BASF.COM

[attachment "20150507045815.pdf" deleted by Leon Zavodnik/BASF-CATALYSTS/BASF]

# REDACTED

From: Robert Scoggins/NA/BASF

To: John Bodmann/BASF-CATALYSTS/BASF, Justin Quach/NA/BASF, Kristen Kaput/NA/BASF, Robert Urig/BASF-CATALYSTS/BASF@BASF, "Bill Grodecki"

<william.grodecki@basf.com>

Cc: Terrence M Vanderbosch/BASF-CATALYSTS/BASF, Brian Beller/NA/BASF, Leon Zavodnik/BASF-CATALYSTS/BASF

Date: 04/28/2015 10:38 PM Subject: Tuesday items

\*PK blender dust collector was puffing light amount of dust during blow down. Inspected bags and caps, and looked to be OK. May have something loose. Unit locked out and lock box #10 on shelf outside on 2nd floor, my key on box is in GL key box. Review and discuss options in morning.

\*#5 RC was down after safety meeting and after discussing with Bob Urig, he advised that combustion blower filter was fouled. Filter cleaned and replaced, calciner was restarted but after reaching approx 700 degrees the calciner failed again. Needs to be looked at in the morning, work order being written again.

\*CTO alarmed around same time that calcier #5 burners failed. CTO had several minor alarms, but one was the ammonia pump stopping. Because of this, feed was not started on #3 calciner yet. Work order being submitted for CTO ammonia pump.

\*Tower 6 loaded and holding due to scheduled electrical work planned on/around #3 tower on Wednesday, per the tower operator.

\*The older pill mix was being used this afternoon and so far it was working well. Per Justin's request, we will need to haul the rest of the older pill mix first thing in the morning, along with the buggy moves for #6 dryer/calciner. Currently have the east pfuadler and hopper full, so we will need to bring buggies down, refill and send back to HC-11 to raise to 2nd floor, along with the pill mix. Coordinate with Shirmer.

Rob



From: Robert Scoggins/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF Cc: Art Hribar/BASF-CATALYSTS/BASF@BASF

Date: 05/03/2015 09:34 AM

Subject: Re: Ni 2458 almost done, PK valve will not hold, other stuff

Also, the pk outlet valve was apparently fixed and replaced yesterday. Would have been nice to know that. We are continuing the batch that was stopped Friday night.

Robert Scoggins---05/03/2015 09:32 AM EDT---We are not done (my bad). There was a whole row of bags in pole barn

From:

Robert Scoggins

To:

Leon Zavodnik

Cc:

Art Hribar

Date:

05/03/2015 09:32 AM EDT

Subject:

Re: Ni 2458 almost done, PK valve will not hold, other stuff

We are not done (my bad). There was a whole row of bags in pole barn

Eleon Zavodnik---05/03/2015 03:17 PM CEDT—Check to see how much nickel we have made against the schedule. It should be almost 90000 pounds so

From:

Leon Zavodník

To:

Robert Scoggins Art Hribar

Cc: Date:

05/03/2015 03:17 PM CEDT

Subject:

Re: Ni 2458 almost done, PK valve will not hold, other stuff

Check to see how much nickel we have made against the schedule. It should be almost 90000 pounds so it seems unlikely we are that close but could be.

Regards, **Leon Zavodnik** Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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Robert Scoggins---05/02/2015 09:36:53 AM---\*\*We are down to the last 4-5 bags of feed for #4 RC. Schedule shows D 1135 SNAP next (after impreg

From: Robert Scoggins/NA/BASF
To: Art Hribar/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF, "Bill Grodecki" <william.grodecki@basf.com>
Cc: Brian Beller/NA/BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF, John Bodmann/BASF-CATALYSTS/BASF, Justin Quach/NA/BASF, Kristen Kaput/NA/BASF, William D Delsenroth/BASF-CATALYSTS/BASF@BASF, Matthew Willbond/BASF-CATALYSTS/BASF@BASF, Gregory A Menz/BASF-CATALYSTS/BASF@BASF, Gregory A Menz/BASF-Date: 05/02/2015 09:36 AM

Subject: Ni 2458 almost done, PK valve will not hold, other stuff

\*\*We are down to the last 4-5 bags of feed for #4 RC. Schedule shows D 1135 SNAP next (after impreg in west pfaudler). I will need cleaning instructions and timing to turn calciner and pfauder around. Also, Sat morning update:

\*\*#5 RC Catoxid down for now (out of feed, calciner kicked out). Calciner was relit this morning, however PK outlet valve not holding on Friday, stopped impregs and emptied blender for mechanics to inspect and hopefully repair. I was told it will need to be pulled and either repaired in the shop or replaced. We do not have a repair kit, and we do not have a spare valve. At the very least, I will be pulling valve and see what what we have. Any assistance with either expediting a replacement valve or repair kit will be needed/appreciated.

#1 MED and calciner running D 1702

#3 RC 5635 down for IMC to inspect/repair F1 actuated exhaust valve (will not operate). Guy Baetjer advised and he will work on the valve (here now). CTO gas valve replacement completed and firing up. IMC watching it for a while to ensure it is working properly. If I get #3 RC back and fired up, will start feeding and exhaust to either CTO or Trimer.

#4 RC as mentioned above running low on feed. However, I now have bad thermocouple in zone 1 causing temps to run too high (gas valve keeps opening 100%). Electrician notified and work order written.

#6 RC and east pfaudler continues, using Shirmer to lift and bring down buggies as needed.

West pfaudler BE 0101 making last batch for now per Justin Quach (will contact Justin Sunday and confirm if any more needed). TK #2 continues BE 0101.

TK #4 starting to get Mark Goodman's items ready for upcoming X 540.

Tower 6 E 406 loaded and running; tower 3 still holding. Screeners both running Cu 0860 (repair made to north screener drum hoist on Friday).

MOD for 6081 delivered Friday to GLs. Will start staging raw materials through weekend on 2nd floor HC-11.

Derby pick - Dortmund (I do like my Dortmunder). Sorry Mr. Z.....

Have a good day all, Rob

# REDACTED

From: Robert Scoggins/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF

Co: Brian Beller/NA/BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF

Date: 04/23/2015 02:07 AM Subject: Re: PK blender incident

See attached...

(See attached file: PK Blender Incident 041915 Washington Discussion - Copy.docx)

Leon Zavodnik---04/22/2015 06:15:34 AM---Rob, Have you talked to Andre and have notes from the conversation.

From: Leon Zavodnik/BASF-CATALYSTS/BASF To: Brian Beller/NA/BASF@BASF

Cc: Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF

Date: 04/22/2015 06:15 AM Subject: Re: PK blender incident

Rob,

Have you talked to Andre and have notes from the conversation.

Regards,

Leon Zavodnik

Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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Brian Beller---04/20/2015 09:34:04 PM---Leon, Mike asked me to check the batch sheets to see if they specify to remove the hoses. I looked t

From: Brian Beller/NA/BASF
To: Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF-CATALYST

### Leon,

Mike asked me to check the batch sheets to see if they specify to remove the hoses. I looked tonight and they **do not** specify any normal operation of the pk including the removal of the hoses.

# Thanks Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

150 years BASF - We create chemistry PK Blender Incident 4-19-15 Midnight Shift (Blender engaged with air hoses connected) Follow-up with Processor/Operator Andre Washington, Union Representative John Crawford April 22, 2015

Regarding the PK Blender incident on April 19, 2015, a discussion was held on Wednesday April 22, 2015 with the involved on-shift processor/operator (Andre Washington) and included Union representation (John Crawford).

The discussion opened with me explaining that during the weekend of April 17-19, the south-end schedule including making pill mix in the PK blender for Al 3915 pill production. Each shift was assigned to make as much pill mix through the weekend, prior to switching production over to Catoxid batches.

Mr. Washington then explained that on Sunday morning April 19 during his midnight shift, he was scheduled to make pill mix on the PK blender. After making his first batch, Mr. Washington was in the process of starting his second batch. After loading the base material into the blender on the second floor, Mr. Washington travelled back to the first floor and proceeded towards the disconnect box to engage the PK blender. When the blender rotation was engaged, Mr. Washington immediately realized that the high pressure and low pressure air hoses were still connected to the blender outlet valve connection. As the blender began to rotate, the two air hoses detached from the outlet valve connection, damaging the outlet valve position indicator housing, the outlet valve fittings, the two air hoses and several sections of stainless tubing. Since the outlet valve was already in the closed position and remained closed during the incident, no pill mix material escaped from the blender.

Mr. Washington continued that he always checks that the air hoses are disconnected prior to starting up the blender....he just happened to not check this time. Mr. Washington added that while he was not in a hurry or rushing to get the task completed, he was trying to maintain a pace that would permit him to achieve four batches of pill mix during his shift...which includes the additional time necessary to prepare the Sterotex and graphite mix for each pill mix batch.

It was also mentioned by both Mr. Washington and Mr. Crawford that while disconnecting the air hoses are a normal part of the blender operation, there are little-to-no visual reminders or references indicating when to disconnect the air hoses from the blender outlet valve. It was suggested by both Mr. Washington and Mr. Crawford that it would be prudent to add information to the PK blender batch sheet indicating when to disconnect the two hoses (incorporate into batch sheet as a "check-off" item), and to also post a sign (or signs) in a strategic location informing/reminding the processor/operator to "disconnect the two outlet valve air hoses prior to starting the blender".

Regards,

Rob Scoggins



From: Brian Beller/NA/BASF

To: Kirk Sullenberger/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Raymond Hazlerig/NA/BASF@BASF

Date: 04/24/2015 10:35 AM

Subject: PK blender valve positioner switch

### FYI.

IMC was able to calibrate the positioner this morning, and the PK discharge valve is functioning properly, we will make batches today.

### Kirk

We would like the switch that controls the positioner valve to be switched out to a heavier duty switch that will stop when all the way open and closed.

Also, the proposed new digital controller will not work well for us due to the fact that we need to be able to close the valve quickly, and it would take to long to use the push button controls.

### Thanks

# **Brian Beller**

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

### 150 years

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From: Stefan J Niewiadomski/BASF-CATALYSTS/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Kristen Kaput/NA/BASF@BASF, William Grodecki/NA/BASF@BASF, Jefferson Lewis/NA/BASF@BASF

Date: 04/14/2015 11:04 AM

Subject: Tuesday morning meeting follow up

Heli-Scrubber building 27 cleaning - open cleaning date now.

T-107 Agitator has been moved to Thursday.

PK Blender Seals - scheduled for Wednesday - ensure PK is clean.

#3 Extruder Barrel Liners - being installed today

#2 Mixer Plows - difference of opinion on cleanliness. More cleaning to be done today. Hopefully plows installed Wednesday.

Tower 6 Sheaves - scheduled for Thursday

### Stefan Niewiadomski

Mobile: +1-440-319-2130 E-Mail: stefan.niewiadomski@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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From: Brian Beller/NA/BASF

To: Robert Urig/BASF-CATALYSTS/BASF@BASF

Cc: Harold J Kramer/BASF-CATALYSTS/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Rob Coffman/BASF-CATALYSTS/BASF@BASF, Joe Yakopich/NA/BASF@BASF, Terrence VanDerbosch/BASF-CATALYSTS/BASF@BASF-CORP, Robert Scoggins/NA/BASF@BASF, Andrea Bal/NA/BASF@BASF

Date: 04/05/2015 12:50 AM

Subject: Re: Bldg. 9 CrVI exposure discovery

I found a scale and some rollers for the drum. I am not sure if this is how we want it set up, but we can look at it on Monday. We will need DL Page to modify the bottom part of the DC discharge and maybe install a hook on the wall so that we can hang the lid while changing the drum. This will make it a lot easier due to typically only having 1 operator in this building while running.

We also need a proper hose to connect the drum lid to the discharge, it looks like 8", we may have a pc lying around the Dept, but DL-Page can probably do this when they raise the discharge.

It would also be nice to mount the scale head on the wall and maybe have an indicator light attached to the set point on the scale that will alarm when the drum needs changed.

(See attached file: WP 20150404 001.jpg)(See attached file: WP 20150404 003.jpg)

Thanks

**Brian Beller** 

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

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Robert Urig---04/03/2015 04:25:36 PM---D.L. Page fabricated a new drop drum lid today. I returned the lid I borrowed this morning to second

From: Robert Urig/BASF-CATALYSTS/BASF To: Robert Urig/BASF-CATALYSTS/BASF@BASF

1

Cc: Brian Beller/NA/BASF@BASF, Harold J Kramer/BASF-CATALYSTS/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Rob Coffman/BASF-CATALYSTS/BASF@BASF, Joe Yakopich/NA/BASF@BASF, Terrence VanDerbosch/BASF-CATALYSTS/BASF@BASF-CORP, Robert Scoggins/NA/BASF@BASF, Andrea Bal/NA/BASF@BASF
Date: 04/03/2015 04:25 PM

Subject: Re: Bldg. 9 CrVI exposure discovery

D.L. Page fabricated a new drop drum lid today. I returned the lid I borrowed this morning to second floor GC. There will be only some final touch ups to do away from the rotary calciner in Al-Gel, but it will not affect start up. The South PK Blender will be ready to go for Monday Morning.

Maintenance will pull the Batch TC Monday morning if they do not get to it this weekend.

#### Robert Urig

Sr. Process Engineer, Battery Materials

Phone: +1 440 329-2574 Mobile: 440-343-5348 E-Mail: robert.urig@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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From: Robert Urig/BASF-CATALYSTS/BASF

To: Brian Beller/NA/BASF@BASF

Cc: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Rob Coffman/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Harold J Kramer/BASF-CATALYSTS/BASF@BASF

Robert Urig---04/03/2015 08:59:53 AM---Brian, thanks for walking though Bldg 16 and Bldg 9 with me yesterday.

Date: 04/03/2015 08:59 AM

Subject: Bldg. 9 CrVI exposure discovery

Brian,

thanks for walking though Bldg 16 and Bldg 9 with me yesterday.

Per our conversation concerning emptying the dust collector periodically in Bldg 9 and the potential of a significant exposure if he were to overflow the drum, I was able to get with DL Page this morning and they are going to replace the existing drop drum lid & inner ring dust drop with one with flexible hose and a dust port. I found one "not in service" we can use from Al-Gel/GC and I will have Page make a new one and replace it in kind.

Now, we will only need to know how full the drum may be to ensure it does not get overfilled because the operator may be guessing how full it is. As we discussed, putting the drop drum on a scale will solve this problem to gage the drum level. We can also administratively control this by adding it to the JSA as well.

If you can find a scale and rollers, that would be great.

thanks again for your help,

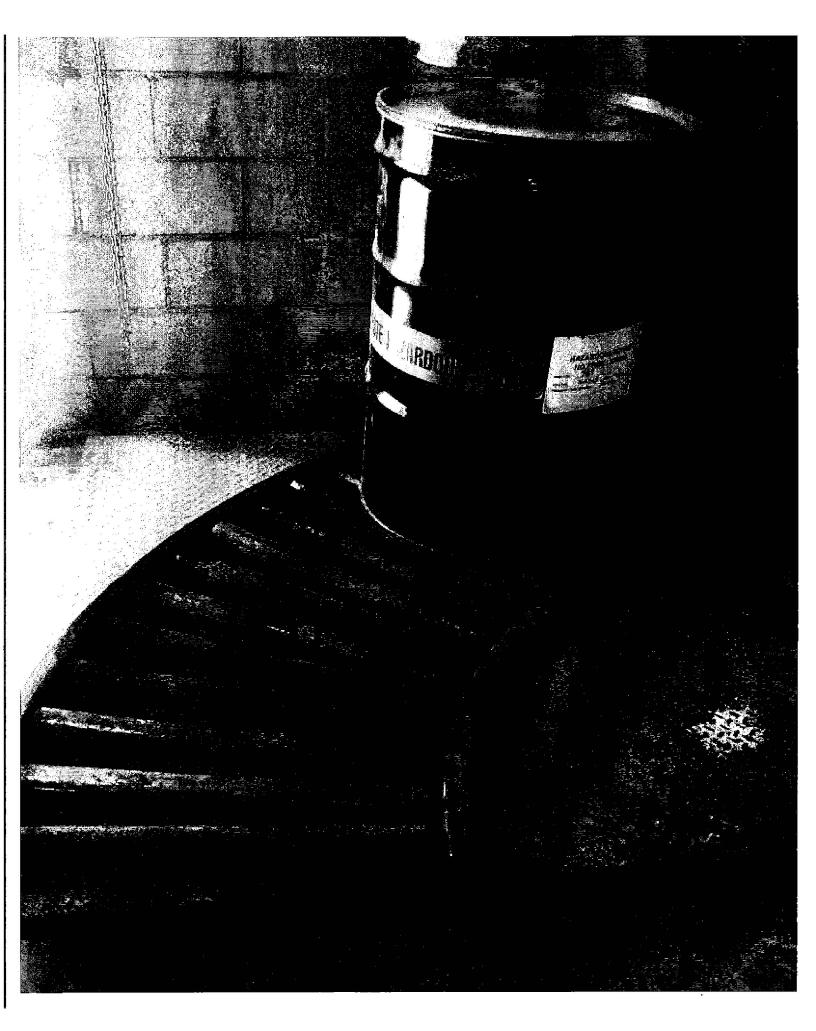
#### Robert Urig

Sr. Process Engineer, Battery Materials

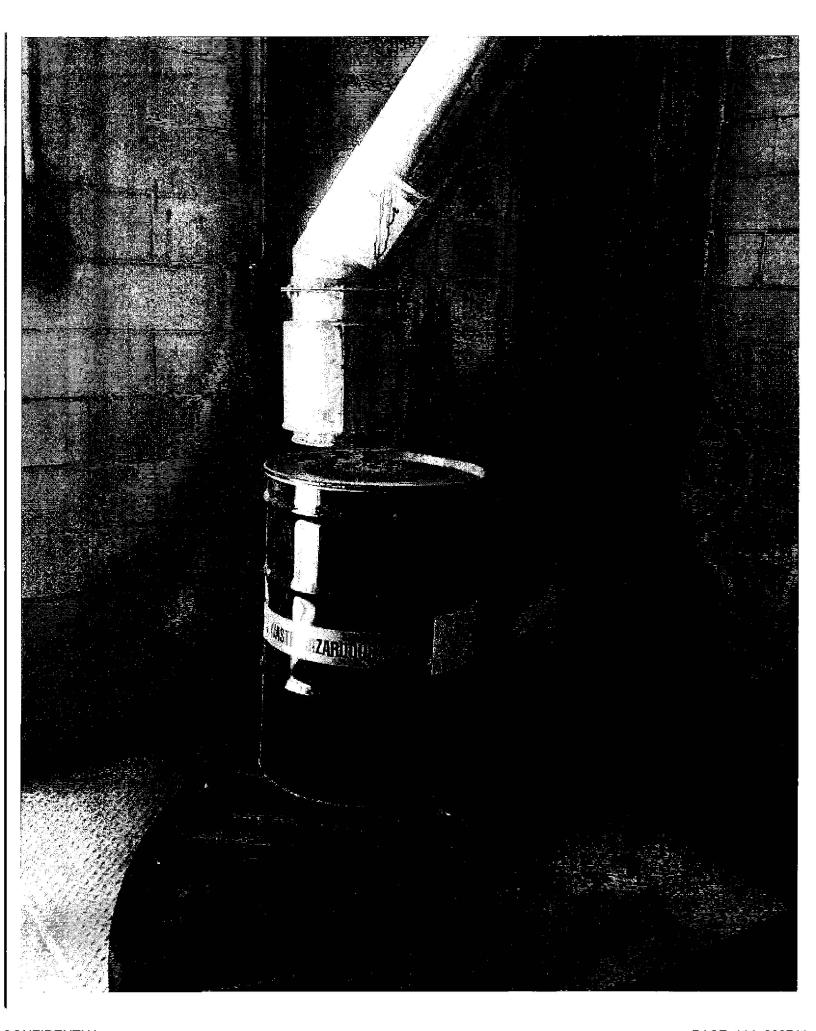
Phone: +1 440 329-2574 Mobile: 440-343-5348 E-Mail: robert.urig@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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From: Kirk Sullenberger/BASF-CATALYSTS/BASF

To: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF

Cc: Brian Beller/NA/BASF@BASF, Jefferson Lewis/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Kristen Kaput/NA/BASF@BASF, Leon

Zavodnik/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Raymond Hazlerig/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, William Grodecki/NA/BASF@BASF

Date: 04/16/2015 04:05 PM

Subject: Re: Replacing the knob on the pk Blender

The on/off switch will be remaining and you can always close the valve with that.

#### Kirk Sullenberger

Control Systems Engineer

Phone: +1 440 329-2581 Mobile: 440-506-1780 Fax: +1 440 329-2403 E-Mail: kirk.sullenberger@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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Terrence M Vanderbosch---04/16/2015 03:59:52 PM---If this is what we go with we will definitely need some training. Would it be easy to close/open qui

From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF

To: Kirk Sullenberger/BASF-CATALYSTS/BASF@BASF

To: Nik Sulleriberger/BASF-@ATALTSTBAST@BASF Cc: Brian Beller/NA/BASF@BASF, Jefferson Lewis/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Kristen Kaput/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Noeml Trent/BASF-CATALYSTS/BASF@BASF, Raymond Hazlerig/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, William Grodecki/NA/BASF@BASF

Date: 04/16/2015 03:59 PM

Subject: Re: Replacing the knob on the pk Blender

If this is what we go with we will definitely need some training. Would it be easy to close/open quickly? Just wondering what would happen if too much was coming out quickly and we needed to quickly close it.

"Kirk Sullenberger---04/16/2015 01:08:16 PM---I would like to offer this as a suggestion for replacing the knob on the pK blender. I would like

From: Kirk Sullenberger/BASF-CATALYSTS/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Jefferson Lewis/NA/BASF@BASF, William Grodecki/NA/BASF@BASF, Kristen Kaput/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Stefan J Niewiadomski/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF Cc: Raymond Hazlerig/NA/BASF@BASF

Date: 04/16/2015 01:08 PM

Subject: Replacing the knob on the pk Blender

I would like to offer this as a suggestion for replacing the knob on the pK blender. I would like to replace the knob with a single loop controller(see picture) We have several of these throughout the plant and should be familiar to operations



Logic in the controller would de-energize the solenoid valves when the output is a 0%. That way there should be no way that the valve will accidental open up. I believe we have all the materials available to do this immediately. Is this change acceptable to operations.

#### Kirk Sullenberger

Control Systems Engineer

Phone: +1 440 329-2581 Mobile: 440-506-1780 Fax: +1 440 329-2403 E-Mail: kirk.sullenberger@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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From: Brian Beller/NA/BASF

To: \$EE\_Leadership\_Team, Tim Anglin/EB-NAFTA/BASF@BASF, Lance Neuschaefer/BASF-CATALYSTS/BASF@BASF, Kathy Fruner/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Thomas Copa/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Daniel Guzzi/NA/BASF@BASF, David D Hritsko/NA/BASF@BASF, Dean R Gadoury/NA/BASF@BASF, Dateesha

Cavin/NA/BASF@BASF, Nancy Galiagher/NA/BASF@BASF, Valerie Topete/NA/BASF@BASF Cc: Brian Beller/NA/BASF@BASF

Date: 04/16/2015 06:58 AM

Subject: AIM 0084-SOPS-15-0050: Submitted

Accident Incident Report 0084-SOPS-15-0050 (Powder discharge from the Dust collector in building #9 for the PK Blender) has been submitted and is now available for your review.

Please click on the link below to view the document.

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From: John Bodmann/BASF-CATALYSTS/BASF

To: Brian Beller/NA/BASF

Cc: Art Hribar/BASF-CATALYSTS/BASF, Justin Quach/NA/BASF, Kristen Kaput/NA/BASF, Leon Zavodnik/BASF-CATALYSTS/BASF, Robert Scoggins/NA/BASF,

Terrence M Vanderbosch/BASF-CATALYSTS/BASF, William Grodecki/NA/BASF

Date: 03/14/2015 07:59 PM

Subject: RE: PK outlet valve issues

Ok, that makes more sense to me. I didn't realize it took so long for that valve to fully close.

-----Original Message-----

From: Brian Beller/NA/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF

cc: Art Hribar/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, Kristen Kaput/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@BASF,William Grodecki/NA/BASF@BASF

Sent on :14.03.2015 18:29:38 EST Subject : RE: PK outlet valve issues

The solenoid is being closed too soon and sometimes before the controller so it does not get the air need to close the valve all the way. There is nothing stuck in the valve but it takes a few seconds for it to fully close. The dial looks like it is closed but it is not fully seated and some material will continue to leak out. If you wait for a few seconds you will see the valve turn just a little more and then it is fully closed. Once closed it will not reopen unless it is plugged back in and the controller is turned back on.

Thanks

Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

150 years

BASF - We create chemistry

John Bodmann---03/14/2015 07;23:07 PM---If it is causing more confusion than help, maybe we shouldn't use the solenoid. We can certainly do

From: John Bodmann/BASF-CATALYSTS/BASF

To: Brian Beller/NA/BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF, Leon Zavodnik/BASF-CATALYSTS/BASF, Robert Scoggins/NA/BASF, Art Hribar/BASF-CATALYSTS/BASF, Justin Quach/NA/BASF, Kristen Kaput/NA/BASF, William Grodecki/NA/BASF

Date: 03/14/2015 07:23 PM

Subject: RE: PK outlet valve issues

If it is causing more confusion than help, maybe we shouldn't use the solenoid. We can certainly do the job without it. But even if the solenoid is closed before the controller is turned off, I would think that the valve would stay closed. The valve position would be at zero so it would not want to open (unless the valve wasn't set to zero?). Or is there something stuck in the valve preventing it from closing?

-----Original Message-----

From : Brian Beller/NA/BASF

To: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-

CATALYSTS/BASF@BASF,Robert Scoggins/NA/BASF@BASF,Art Hribar/BASF-CATALYSTS/BASF@BASF,John Bodmann/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, Kristen Kaput/NA/BASF@BASF, William

Grodecki/NA/BASF@BASF

cc: Brian Beller/NA/BASF@BASF Sent on :14.03.2015 16:18:17 EST Subject: Re: PK outlet valve issues

I have had a few issues with the PK blender this weekend. I came in today to operators saying that the discharge valve came open while they were spinning a batch, and it made a mess. Come to find out the valve did not close all the way and material was leaking out while it was spinning. I went to check on it with the afternoon shift and found that we have installed a new solenoid valve to the air lines and people have not been trained on how to use it. Operators are closing the solenoid before turning off the controller causing the valve to stay open partially. I have pulled the operator off the job for now because we will most likely have more issues with this valve not closing all the way. If I have to run it I will need to show each operator how to use this so that it will be all the way closed when running batches.

I understand the need to be able to turn off the air to the lines but it seems like the switch is an unnecessary extra step that is causing more issues. I think that we need to work on the process a little more, Any thoughts, and do I need to run this over the weekend or can it wait for Monday?

Thanks

Brian Beller

Phone: 440-329-2561 Mobile: +1-440-242-8048 E-Mail: brian.beller@basf.com Postal Address: BASF Corporation 120 Pine St, Elyria, Ohio 44035, USA

150 years

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Terrence M Vanderbosch---03/13/2015 07:36:39 AM---It is now. I contacted Greg also.

From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF Cc: Robert Scoggins/NA/BASF@BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Justin Quach/NA/BASF@BASF, Kristen Kaput/NA/BASF@BASF, William Grodecki/NA/BASF@BASF Date: 03/13/2015 07:36 AM Subject: Re: PK outlet valve issues

It is now. I contacted Greg also.

Leon Zavodnik---03/13/2015 06:15:54 AM---There is something in the valve body or gearing that has caused this most likely. Is a work notifica

From: Leon Zavodnik/BASF-CATALYSTS/BASF

To: Robert Scoggins/NA/BASF@BASF

Cc: Art Hribar/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Justin

Quach/NA/BASF@BASF, Kristen Kaput/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, William Grodecki/NA/BASF@BASF

Date: 03/13/2015 06:15 AM

Subject: Re: PK outlet valve issues

There is something in the valve body or gearing that has caused this most likely. Is a work notification in?

Regards,

Leon Zavodnik

Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years

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TRobert Scoggins---03/13/2015 02:46:31 AM---Leon/Justin, During the unloading of a batch of Al 3915 pill mix late Thur afternoon, the operator c

From: Robert Scoggins/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF, Justin Quach/NA/BASF

Cc: William Grodecki/NA/BASF@BASF, Kristen Kaput/NA/BASF, Justin Quach/NA/BASF, John Bodmann/BASF-CATALYSTS/BASF, Art Hribar/BASF-

CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF

Date: 03/13/2015 02:46 AM Subject: PK outlet valve issues

#### Leon/Justin,

During the unloading of a batch of Al 3915 pill mix late Thur afternoon, the operator contacted my CRT for assistance. The PK was being emptied into a pill mix bag, and when the operator tried shutting the valve to change bags, the valve would not fully close (see pic). It appeared that valve was somewhere around 10% open, based on the position of the indicator. The full bag was quickly removed and a second bag was installed to catch the balance of the batch still in the blender. After completely emptying the blender into the second bag, the outlet valve was opened and closed several times to verify whether any change occurred in the position, and the valve would still not completely close.

[attachment "PK outlet valve position indicator.jpg" deleted by Leon Zavodnik/BASF-CATALYSTS/BASF]

My first thought was that perhaps something was obstructing the internal valve, not allowing it to fully close, but we opened the loading lid and did not see any obstruction inside the blender or around the valve. The following pic shows the valve fully opened...additional attempts to fully close the valve resulted in the same slightly opened position.

[attachment "PK outlet valve fully opened.jpg" deleted by Leon Zavodnik/BASF-CATALYSTS/BASF]

I am writing a work notification to have maintenance look at the valve (**Mike**, please have an operator flush out the PK so this can be looked at first thing on Friday). Since we did have a mechanical issue with the valve and bit of a plant upset (lost some of the powder to the floor during bag change and clean-up followed), I will assume that an AIM will be needed. If so, I will get this written today.

Rob

4



From: John Bodmann/BASF-CATALYSTS/BASF
To: Leon Zavodnik/BASF-CATALYSTS/BASF
Cc: Brian Beller/NA/BASF, Robert Scoggins/NA/BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF
Date: 03/23/2015 08:48 PM
Subject: RE: PK blender batch sheets

Yes, I printed the wrong one off today in a rush to get it up there before 2nd shift start. A correct one was just forwarded a minute ago.

-----Original Message-----

From: Leon Zavodnik/BASF-CATALYSTS/BASF
To: John Bodmann/BASF-CATALYSTS/BASF@BASF

cc: Brian Beller/NA/BASF@BASF,Robert Scoggins/NA/BASF@BASF,Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@BASF Sent on :23.03.2015 19:29:57 EST Subject : RE: PK blender batch sheets

John,

We can't forget stuff like this. There was an action item to correct all of the sheets after the incident so this should have been completed

Regards,
Leon Zavodnik
Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

150 years BASF - We create chemistry John Bodmann---03/23/2015 08:11:15 PM---Yes, I had fixed them for the 4011 but got rushed today to start up and included the old ones for th

From: John Bodmann/BASF-CATALYSTS/BASF
To: Terrence M Vandertosch/BASF-CATALYSTS/BASF
Cc: Robert Scoggins/NA/BASF, Brian Beller/NA/BASF, Leon Zavodnik/BASF-CATALYSTS/BASF
Date: 03/23/2015 08:11 PM
Subject: RE: PK blender batch sheets

Yes, I had fixed them for the 4011 but got rushed today to start up and included the old ones for the 4010. I'll get the correct ones out asap.

-----Original Message-----

From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF

cc: Robert Scoggins/NA/BASF@BASF,Brian Beller/NA/BASF@BASF,Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Sent on :23.03.2015 18:54:23 EST Subject : PK blender batch sheets

John, due to the serious incident that happened on the PK blender, the 4010 batch sheets that were dropped off today need to be changed. See the items with the asterisk by them in the attachment. Thanks.

---- Forwarded by Terrence M Vanderbosch/BASF-CATALYSTS/BASF on 03/23/2015 07:49 PM ----

From: TERRENCE, VANDERBOSCH@BASF, COM To: TERRENCE, VANDERBOSCH@BASF, COM

Date: 03/23/2015 07:47 PM

Subject:



From: Robert Scoggins/NA/BASF
To: \$EE\_Leadership\_Team, Tim Anglin/EB-NAFTA/BASF@BASF, Lance Neuschaefer/BASF-CATALYSTS/BASF@BASF, Kathy Fruner/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF, Thomas Copa/NA/BASF@BASF, Brian Beller/NA/BASF, Daniel Guzzi/NA/BASF@BASF, David D Hritsko/NA/BASF@BASF, Dean R Gadoury/NA/BASF@BASF, Dateesha Cavin/NA/BASF@BASF, Nancy Gallagher/NA/BASF@BASF

Cc: Robert Scoggins/NA/BASF

Date: 03/16/2015 11:34 AM Subject: AIM 0084-SOPS-15-0029: Submitted

Accident Incident Report 0084-SOPS-15-0029 (PK Blender outlet valve would not close completely) has been submitted and is now available for your review.

Please click on the link below to view the document.

(1)

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From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF To: John Bodmann/BASF-CATALYSTS/BASF@BASF

Cc: Robert Scoggins/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Date: 03/23/2015 07:54 PM

Subject: PK blender batch sheets

John, due to the serious incident that happened on the PK blender, the 4010 batch sheets that were dropped off today need to be changed. See the items with the asterisk by them in the attachment. Thanks.

----- Forwarded by Terrence M Vanderbosch/BASF-CATALYSTS/BASF on 03/23/2015 07:49 PM -----

From: TERRENCE.VANDERBOSCH@BASF.COM To: TERRENCE.VANDERBOSCH@BASF.COM

Date: 03/23/2015 07:47 PM

Subject:

(See attached file: 20150323194246.pdf)

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## 4 0 1 0 SOLUTION MAKE-UP AND IMPREGNATION PROCEDURE / BATCH SHEET

Product:	4010	Article Number	57330087 / 57330140 / 57	338196 SAP_	203079357
1) Charge P-K B	lender with:	pounds	calcined 4011 Intermediate (56223	447) Lot No. <b>EL00037</b>	
2) To day tank, a	add the following a	nd agitate for at least 5 min	utes. Do not heat solution. (Engi	neer will fill this out.)	
<u>93</u> 5	lbs Cerium-Pra	seodymium nitrate soln (5	7351446)	•	
<u>60</u>	Ibs Copper nitr aal flush water	ate soln (56213165)	%Cu = 16.1%	[SAP: 9.7 lbs as Cu cons	sumed per batch]
3) Start PK blend	<b>2</b> - 11 - 11 - 11 - 11 - 11 - 11		nk to P-K over a period of 20-30 m	nutes. Flush tank with 2 gals, water	, discharge to PK.
4) Continue rota	ting PK 5-10 minut	tes after all solution has be	en charged.		
5) Before releasi	ing discharge valv	e, slowly relieve pressure in	n PK by loosening the top loading p	ort cover. 🛪	
6) Unload mater	ial from the PK into	reused alumina sunareac	ke Transfer to Gen Cat RC #5	120 hags *	

		Batch	4011 Intermediate (56223447)		Ce-Pr nitrate soln		Cu nitrate	Water			
Date	Shift	Operator	No.	Lot No.	Bag No.	Net wt (lb)	Lot No.	Qty (lb)	Qty (lb)	(lbs	Comments
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From: John Bodmann/BASF-CATALYSTS/BASF To: Leon Zavodnik/BASF-CATALYSTS/BASF

Date: 02/24/2015 08:06 PM

Subject: RE: Pk Blender positioner In BLD 9 - Safety issues

Will do

-----Original Message-----

From ; Leon Zavodnik/BASF-CATALYSTS/BASF
To : John Bodmann/BASF-CATALYSTS/BASF@BASF,Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF,Robert Scoggins/NA/BASF@BASF,Brian Beller/NA/BASF@BASF

cc:

Sent on :24.02.2015 18:01:34 EST

Subject: Fw: Pk Blender positioner In BLD 9 - Safety issues

John,

Could you look into this tomorrow to see what may be occurring.

I wanted the GL's to be aware also in case they can look at it tonight.

Regards,

Leon Zavodnik

Operations Manager

Phone: +1 440 329-2592 Mobile: 440-821-6647 E-Mail: leon.zavodnik@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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---- Forwarded by Leon Zavodnik/BASF-CATALYSTS/BASF on 02/24/2015 05:57 PM -----

From: Guy K Baetjer <gbaetjer@imccontrol.com> To: <leon.zavodnik@basf.com>, <kirk.sullenberger@basf.com> Co: <sandy.kowaleski@basf.com>, <abdallah.ahmed@basf.com>, <rory.odonnell@basf.com> Date: 02/24/2015 04:33 PM Subject: Pk Blender positioner In BLD 9 - Safety Issues

#### Everyone

We recently worked on the air positioner control panel in Bld 9. This is the panel that controls the air valve that opens and closes the valve on the bottom of the blender in Bld 9. This is the valve that the operators thought it was open and clearly was not a month ago and almost hurt someone several weeks ago when the blender was pressurized. Kirk asked us to disconnect power to the display on this panel because the display was being missinterepted as the actual valve position by the operators. It is clearly not the position of the valve or the feedback of the valve. It is just the desired signal to the valve.

We disconnect power from the digital display about a week ago. We also wanted to make sure after removing power to the display that this control panel did function properly.

We found out that when this valve is closed and we disconnect the air supply (60 psi supply) first, then the air control signal second (3-15 psi) from the positioner, the valve will sometimes OPEN expectantly. It does not open when you disconnect the 3-15 psi signal first. This procedure of disconnecting air lines is normal in your operation when they want to mix.

We were very surprised by this event. It only does this once in a while.

We recommend that this valve on the bottom of the blender be spring loaded air to open valve. This would resolve this issue. Kirk may have some ideas

Guy

Guy K Baetjer President Industrial Measurement & Control Office 440-877-1140 Fax 440-877-9594 ISO/IEC 17025 Accredited Visit us at: www.imccontrol.com

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# REDACTED



No.5 5 RC / PK Process Safety Review

Tue 03/03/2015 2:00 PM - 3:00 PM

Attendance is for Leon Zavodnik

Chair:

Robert Urig/BASF-CATALYSTS/BASF

Location:

LIB Trailer conference room

This entry has an alarm. The alarm will go off before the entry starts.

Required:

Harold J Kramer/BASF-CATALYSTS/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Tim Anglin/EB-NAFTA/BASF@BASF

1

Optional:

Rob Coffman/BASF-CATALYSTS/BASF@BASF, William D Deisenroth/BASF-CATALYSTS/BASF@BASF, William Grodecki/NA/BASF@BASF

#### Description

This project optimization of Catoxid currently being blended on the South PK Blender and calcined on the No. 5 RC and the objective is as follows:

The focus of the first phase of these improvements will be to minimize downtime and implement employee exposure improvements at the PK Blender and at the No.5 RC that can be purchased, installed and commissioned before March 24, 2015.

Phases 1 of this process improvement are as follows:

- 1. Minimize/control the counter current air flow through the tube while maintaining the dust collector bag house temperature to minimize condensation in the collector.
- Improve point source dust collection at bulk bag discharge and final packaging.
- 3. Improve dust collection in Building 9 at the PK Blender discharge.

Process Safety Review of the modifications being made to the dust collection system in AlGel on the No. 5 RC and in Building 9 at the PK Blender.

The permit data for 5b:

Brand: Ultra Ind Serial: BV-49-100 Installed: 6/1/84

Type: Pulse jet / Cartridge Filter

Inlet: 1800 acfm

The main purpose of this review will be to ensure we have adequate dust control and it does not affect our current air permit.

We will close the meeting with updating with where we are at in the project and milestones that need to met prior to start up.

(See attached file: Elyria Catalyst Project No 5 RC System for Cr-0218 Phase 1 Update 02\_27\_2015.docx)

Personal Notes



From: Justin Quach/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Date: 03/09/2015 02:33 PM Subject: Title V - PK Blender

Leon,

September 16th - Bags taken out of PK

September 18th - Caps installed and balancing of dust collection ports. 14 bags remain. 3-5" H2O range achieved September 23rd - Found dP low again, dust collection ports on discharge clogged which dropped airflow. Project to relocate ports and possibly change blower sheaves started.

October 22nd - New sheaves installed on blower to help stay within ranges more consistently. Dust collection ports rebalanced and a few rows of bags reinstalled.

October 31st - New dust collection ports on discharge installed

Current situation: Half of the PK dust collector bags installed(so half are still capped), new sheaves installed(still not to full original RPM though), permit still not changed to lower dP range.

Hope this is what you need.

Regards,

#### Justin Quach

Process Engineer - Catalysts

Phone: +1 440 329-2501 Mobile: +1-440-822-9800 Fax: +1 440 329-2403 E-Mail: justin.quach@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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From: Germain Kons/EU/BASF

To: Noemi Trent/BASF-CATALYSTS/BASF@BASF

Cc: Bill Dolan/BASF-CATALYSTS/BASF@BASF@BASF-CORP, Al Maglio/BASF-CATALYSTS/BASF@BASF-CORP, Michael Vogt/NA/BASF@BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Danna Mooney/NA/BASF@BASF, Mike Pence/BASF-CATALYSTS/BASF@BASF, Roy Price/BASF

CATALYSTS/BASF@BASF, Sriram Srinivasan/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Sandy

Kowaleski/NA/BASF@BASF

Date: 02/11/2015 11:38 AM

Subject: \*\*Internal\*\* Re: Re: WG: RE: Polymer Valley Tolling for Selexsorb Internediate

Hi Noemi,

I do not think that anybody is requiring Elyria to work in an unsafe manner. On the contrary, we all want to make this a safer workplace and this is also the reason why Al started working on this product transfer mid of last year.

However the latest news I am getting on delays from Elyria seem to be around mechanical issues.

Best regards

Germain

#### Mr Germain Kons

**Business Manager Petrochemical Purification** 

Phone: +49 621 60-97789 Mobile: +49 172 742 4593 Fax: - E-Mail: germain.kons@basf.com

Postal Address: BASF SE, G-CCP/DP - MA-R64-5, 67056 Ludwigshafen, Germany

150 years

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Noemi Trent---11.02.2015 16:10:40---Hi Germain, Realize that Elyria will continue to focus on ensuring that the twin cone blender be ope

From: Noemi Trent/BASF-CATALYSTS/BASF

To: Germain Kons/EU/BASF@BASF

Cc: Bill Dolan/BASF-CATALYSTS/BASF@BASF@BASF-CORP, AI Maglio/BASF-CATALYSTS/BASF@BASF-CORP, Michael Vogt/NA/BASF@BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Danna Mooriey/NA/BASF@BASF, Mike Pence/BASF-CATALYSTS/BASF@BASF, Roy Price/BASF-CATALYSTS/BASF@BASF, Roy Price/BASF-CATALYSTS/BASF@BASF, Sriram Srinivasan/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Sandy Kowaleski/NA/BASF@BASF

Date: 11.02.2015 16:10

Subject; Re; \*\*Internal\*\* Re: WG: RE: Polymer Valley Tolling for Selexsorb Internediate

#### Hi Germain,

Realize that Elyria will continue to focus on ensuring that the twin cone blender be operated in a safe and reasonable manner to eliminate risks and to avoid another very close call that could have resulted in a very serious injury. That is the sole reason for my urgency to transfer to another type of blending technology more suited for this application. Hope you understand.

#### Regards, Noemi Trent

Process Technology Manager, CCP

Phone: +1 440 329-2564 Mobile: 440-315-8827 E-Mail: noemi.trent@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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Germain Kons---02/11/2015 09:09:24 AM---Bill, Al, thanks for these clarifications. Based on this, I would ask you to put together a small do

From: Germain Kons/EU/BASF
To: Bill Dolan/BASF-CATALYSTS/BASF@BASF@BASF-CORP, AI Maglio/BASF-CATALYSTS/BASF@BASF-CORP, Michael Vogt/NA/BASF@BASF
Cc: Art Hribar/BASF-CATALYSTS/BASF@BASF, Danna Mooney/NA/BASF@BASF, Mike Pence/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Roy Price/BASF-CATALYSTS/BASF@BASF, Sriram Srintvasan/BASF-CATALYSTS/BASF@BASF
Date: 02/11/2015 09:09 AM
Subject: \*\*Internal\*\* Re: WG; RE: Polymer Valley Tolling for Selexsorb Internediate

Bill, Al,

thanks for these clarifications. Based on this, I would ask you to put together a small documentation on the work done for this product transfer and the results of your analysis, taking into account earlier work done on this subject.

This should then be the basis for Mike to set up the next steps, assuming that Mike takes care of this (I do not know what Ram's role is in this right now).

Mike,

can you provide a time line for the next steps to be done? From my point of view we need a contract (including specs for the raw materials and the tolled product), possibly in the first run until the end of 2015 including forecast part and committed production times of the toller.

Also we would need to re-route the delivery of the Sodium Y Zeolite LOI as well as have the procurement taken back to Roy, is my guess.

The sodium acetate part, you will need to take also up. The question is on who manages the transport

from the toller to our plant and where to store the intermediate.

Looking forward for your message.

In the mean time, until the product is produced at the toller, Elyria needs to ensure to honor their commitments w/o jeopardizing our production and our commitments to our customers.

Thanks to all and best regards

Germain

#### Mr Germain Kons

**Business Manager Petrochemical Purification** 

Phone: +49 621 60-97789 Mobile: +49 172 742 4593 Fax: - E-Mail: germain.kons@basf.com Postal Address: BASF SE, G-CCP/DP - MA-R64-5, 67056 Ludwigshafen, Germany

#### 150 years BASF - We create chemistry

Bill Dolan---09.02.2015 21:51:29---Germain To add to Al's comments

From: Bill Dolan/BASF-CATALYSTS/BASF@BASF

To: AI Maglio/BASF-CATALYSTS/BASF@BASF@BASF-CORP

Cc: Germain Kons/EU/BASF@BASF@BASF-CORP, Art Hribar/BASF-CATALYSTS/BASF@BASF, Danna Mooney/NA/BASF@BASF, Michael Vogt/NA/BASF@BASF, Mike Pence/BASF-CATALYSTS/BASF@BASF, Noeml Trent/BASF-CATALYSTS/BASF@BASF, Roy Price/BASF-

CATALYSTS/BASF@BASF, Sriram Srinivasan/BASF-CATALYSTS/BASF@BASF

Date: 09.02.2015 21:51

Subject: Re: \*\*Internal\*\* WG: RE: Polymer Valley Tolling for Selexsorb Internediate

#### Germain

To add to Al's comments

During the program development we ran a trial at Rollo mixer and formed into finished product. The finished products was tested for oxygenate capacity and degradation -- it looked good on both.

For polymer valley we looked at the variation in loi and soda level

regards

Bill

#### Bill Dolan

Research Associate, GCC/CC

Phone: +1 732 205-5596 E-Mail: bill.dolan@basf.com

Postal Address: BASF Corporation, Iselin, 08830 Iselin, USA

150 years

**BASF** - We create chemistry

Al Maglio--02/09/2015 12:43:29 PM---Hi Germain, We approved Polymer Valley based on consistency of sodium assay in random samples taken

From: AI Maglio/BASF-CATALYSTS/BASF@BASF
To: Germain Kons/EU/BASF@BASF@BASF-CORP
Co: Art Hribar/BASF-CATALYSTS/BASF@BASF, Bill Dolan/BASF-CATALYSTS/BASF@BASF-CORP, Danna Mooney/NA/BASF@BASF, Michael Vogt/NA/BASF@BASF, Mike Pence/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Roy Price/BASF-CATALYSTS/BASF@BASF-CATALYSTS/BASF@BASF
Date: 02/09/2015 12:43 PM
Subject: Re: \*\*Internal\*\* WG: RE: Polymer Valley Tolling for Selexsorb Internediate

Hi Germain,

We approved Polymer Valley based on consistency of sodium assay in random samples taken from their shipment of sodium-impregnated Y zeolite. We did not prepare a finished adsorbent nor do any performance testing. Given that they will use the preferred equipment, we see no issues going directly to full-scale production. In essence, we were prepared to purchase this equipment so it seems reasonable to approve based on basic design. Nonetheless, we will add the extra measure of security by supporting the initial start up.

We should use the same quality checks we currently do in Elyria. And, we will develop any site-specific tests during the support of the initial campaign.

I agree that a tolling agreement needs to be prepared. I suspect this will be overseen by Ram and will cover the issues you presented.

I sensed some urgency from Elyria to get this toller qualified ASAP so we are moving quite fast and not doing multiple qualification steps (e.g., a 10-ton production trial). However, given the previous qualification runs on the Rollo-Mixer we have a high degree of confidence this will pass. We should have a backup plan in case the 50-ton run presents a problem.

#### Al Maglio

Principal Engineer, GCC/CC

Phone: +1 732 205-6147 Mobile: 732-236-9292 E-Mail: al.maglio@basf.com Postal Address: BASF Corporation, 25 Middlesex-Essex Tpke, Iselin, NJ 08830, USA

150 years BASF - We create chemistry

Germain Kons---02/09/2015 12:14:22 PM---Al, Bill, I understand that Noemi now wants to get rid of this product from the Elyria production as

From: Germain Kons/EU/BASF@BASF
To: Al Maglio/BASF-CATALYSTS/BASF@BASF-CORP, Bill Dolan/BASF-CATALYSTS/BASF@BASF-CORP
Cc: Noemi Trent/BASF-CATALYSTS/BASF@BASF, Roy Price/BASF-CATALYSTS/BASF@BASF, Sriram Srinivasan/BASF-CATALYSTS/BASF@BASF, Danna Mooney/NA/BASF@BASF, Art Hribar/BASF-CATALYSTS/BASF@BASF, Mike Pence/BASF-CATALYSTS/BASF@BASF, Michael Vogt/NA/BASF@BASF Dale: 02/09/2015 12:14 PM
Subject: \*\*Internal\*\* WG: RE: Polymer Valley Tolling for Selexsorb Internediate

Al, Bill,

I understand that Noemi now wants to get rid of this product from the Elyria production as fast as possible (whereas before the Elyria management had no problem to kill an investment project at Vidalia to do it right away in Vidalia).

However I want to understand a bit better which evaluations you did based on a lab sample. A lab sample of the impregnated product or a lab sample of the finished product? And which analysis have been done to do the evaluation?

Also what is not clear to me is based on which parameters we take this material?

What will be the spec to be fulfilled for the material before it can be delivered to Vidalia (and this needs to be part of the tolling

contract with Polymer Valley as well as they will expect that we will have a spec on the raw materials we will provide them).

Any parameter testing here? Or are we just able to copy the spec from Elyria?

What will happen if the raw materials we will provide to them are off-spec (and this happened before)? What will happen if the tolled product is off-spec?

Also as this will be a tolling in the hands of Adsorbents, I copied Mike, as most likely we will have to re-route the existing handling of the raw material from Europe (becoming our responsibility) as well as the procurement of the sodium acetate as I do not think that Elyria will continue doing any supply chain support for us, once the product is out of Elyria.

Thanks for your clarifications.

Best regards

Germain

#### Mr Germain Kons

**Business Manager Petrochemical Purification** 

Phone: +49 621 60-97789 Mobile: +49 172 742 4593 Fax: - E-Mail: germain.kons@basf.com

Postal Address: BASF SE, G-CCP/DP - MA-R64-5, 67056 Ludwigshafen, Germany

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---- Forwarded by Germain Kons/EU/BASF on 09.02.2015 18:02 ----

From: Noemi Trent/BASF-CATALYSTS/BASF

To: AI Maglio/BASF-CATALYSTS/BASF, Roy Price/BASF-CATALYSTS/BASF, Sriram Srinivasan/BASF-CATALYSTS/BASF, Germain Kons/EU/BASF, Mike

Pence/BASF-CATALYSTS/BASF, Art Hribar/BASF-CATALYSTS/BASF

Cc: Danna Mooney/NA/BASF, Bill Dolan/BASF-CATALYSTS/BASF

Date: 09.02.2015 17:39

Subject: RE: Polymer Valley Tolling for Selexsorb Internediate

Thanks Al for your attention to this! I know you are aware of the high risk of serious injury with our existing blending process.

Mike and Art- what info do you need to get this toller started? Who needs to be involved? Is it possible to transfer the remainder of the campaign to them without missing a shipment?

Regards, Noemi

-----Original Message-----

From: Al Maglio/BASF-CATALYSTS/BASF

To: Roy Price/BASF-CATALYSTS/BASF@BASF, Sriram Srinivasan/BASF-CATALYSTS/BASF@BASF, Germain Kons/EU/BASF@BASF, Mike Pence/BASF-CATALYSTS/BASF@BASF

cc : Danna Mooney/NA/BASF@BASF,Bill Dolan/BASF-CATALYSTS/BASF@BASF,Noemi Trent/BASF-

CATALYSTS/BASF@BASF

Sent on :09.02.2015 11:32:19 EST

Subject : Polymer Valley Tolling for Selexsorb Intermediate

Dear All,

Attached is a quote from Polymer Valley for the impregnation of sodium acetate onto zeolite Y for the Selexsorb CDL intermediate, ex chemicals. I think the processing fee is very reasonable and should allow us to alleviate a hardship in Elyria. I'm not sure how to move this forward but as I understand there is an urgent need to process 50 tons of zeolite for production at Vidalia. Bill Dolan and I have approved Polymer Valley based on a lab sample and will provide support for the first commercial trial. I assume that the manufacturing team will take this from here. Please let me know if we can help further.

#### Al Maglio

Principal Engineer, GCC/CC

Phone: +1 732 205-6147 Mobile: 732-236-9292 E-Mail: al.maglio@basf.com Postal Address: BASF Corporation, 25 Middlesex-Essex Tpke, Iselin, NJ 08830, USA

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---- Forwarded by Al Maglio/BASF-CATALYSTS/BASF on 02/09/2015 11:25 AM -----

From: "Michael R. Beck, Itl" <michaelbeck3@polymervalleychemicals.com>
To: Al Maglio <al.maglio@basf.com>
Date: 02/09/2015 11:17 AM
Subject: RE: Zeolite Tolling Trial

Hi Al,

Thanks for the update Friday.

Our price for toll manufacturing your treated Zeolite would be 0.1965/lb., FOB Macon, GA, terms Net30.

If this is acceptable you can go ahead and plan on sending the 50 tons of material and corresponding amount of sodium acetate to our plant.

We appreciate the opportunity and hope this gets us into your approved toll manufacturers. Maybe there will be other opportunities to collaborate in the future.

Thanks again and let me know if you have any questions.

Mike

Michael Beck

Polymer Valley Chemicals, Inc.



From: Kirk Sullenberger/BASF-CATALYSTS/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Noeml Trent/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Jefferson Lewis/NA/BASF@BASF, William Grodecki/NA/BASF@BASF, Kristen Kaput/NA/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Stefan J Niewladomski/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF

Cc: Raymond Hazlerig/NA/BASF@BASF, Guy K Baetjer <gbaetjer@imccontrol.com>

Date: 02/26/2015 08:24 AM Subject: PK Blender Valve

I have been asked to offer some suggestions on the PK Blender Valve and the issues that were outlined in the IMC's email.

My major recommendation would be to replace the current actuator with a spring return actuator.

The reason is whenever you lose any the following, air pressure, signal pressure or electronic signal the valve will be closed. I am currently getting a quote on a replacement actuator. I do not have delivery times, but a spring return actuator will probably be a minimum of a two week lead time.

Another thing we can do really quick. Is place an on/off switch and a solenoid valve on the air lines and do not rely on the rheostat as the method of shutoff. In other words, when the switch is off, the valve is 100 % closed no matter what the rheostat is set at. When the switch is on the rheostat is controlling the valve position.

### Kirk Sullenberger

Control Systems Engineer

Phone: +1 440 329-2581 Mobile: 440-506-1780 Fax: +1 440 329-2403 E-Mail: kirk.sullenberger@basf.com Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF To:: \$EE\_Leadership\_Team, Tim Anglin/EB-NAFTA/BASF@BASF, Lance Neuschaefer/BASF-CATALYSTS/BASF@BASF, Kathy Fruner/BASF-CATALYSTS/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Thomas Copa/NA/BASF@BASF, Brian Beller/NA/BASF@BASF, Daniel Guzzi/NA/BASF@BASF, David D Hritsko/NA/BASF@BASF, Dean R Gadoury/NA/BASF@BASF
CC: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF
Date: 03/03/2015 04:55 04:56

Date: 02/03/2015 04:56 AM

Subject: AIM 0084-SOPS-15-0014: Submitted

Accident Incident Report 0084-SOPS-15-0014 (Pk blender lid pressurized and came off.) has been submitted and is now available for your review.

Please click on the link below to view the document.

**(**'].

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From: Sandy Kowaleski/NA/BASF

To: Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF

Cc: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Date: 02/10/2015 08:50 AM Subject: Re: Safety note

Hi Mike,

Great....keep up your time with the operators and on the floor it will make a difference. I like that you lead by example! And lastly, the decision on the PK is absolutely right.

Sincerely,

Sandy Kowaleski

Site Director

Phone: +1 440 329-2510 Mobile: +1-440-225-8397 E-Mail: sandy.kowaleski@basf.com

Postal Address: BASF Corporation, Elyria, 44035 Elyria, USA

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Terrence M Vanderbosch---02/09/2015 09:09:15 PM--- A few quick things that I have done recently to help improve safety performance: Spending a

From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF

To: Sandy Kowaleski/NA/BASF@BASF

Cc: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Date: 02/09/2015 09:09 PM

Subject: Safety note

1

A few quick things that I have done recently to help improve safety performance:

Spending additional time with safe work permits in the field(verifying equipment is drained/depressurized during a line break). Talking with other safe work permit writers also.

Last week on third shift I spent a lot of extra time spreading ice melt outside of doorways and walkways...encouraged others to do the same.

Shut down the PK blender after a big scare when the lid shot off the top. I also involved several operators in the AIM investigation as well as asking their ideas of how to make the process safer.

Talked with several operators about specific housekeeping expectations.

Have been urging operators to speak up and think twice when something doesn't seem right.

Mike



From: Justin Quach/NA/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF

Cc: Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF, Kristen Kaput/NA/BASF@BASF, William Grodecki/NA/BASF@BASF, Greg Hebb/BASF-CATALYSTS/BASF@BASF Date: 10/31/2014 05:28 PM

Subject: Bld 9 Dust Collector Redesign

All,

The new dust collection design for the PK Blender in building 9 has been installed. See the following. It is quite a strong pull so I have the suction throttled back some. Lets keep an eye and make sure we aren't getting too much in the drop drum off the dust collector. Hopefully this design should work better though and not plug like the old. Thanks



Regards,

# **Justin Quach**

Process Engineer - Catalysts

Phone: 440-329-2501, Mobile: 440-822-9800, Fax: 440-329-2403, E-Mail: Justin.Quach@basf.com Postal Address: Catalysts Division, BASF Corporation, 120 Pine St, Elyria, OH 44035

BASF Corporation - The Chemical Company

# REDACTED

From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF

Cc: Brian Beller/NA/BASF@BASF, Jack Pettry/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-

CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF

Date: 02/05/2015 12:48 AM

Subject: Re: Na Selexsorb batch sheet modification

"9) Make sure air line is open to PK butterfly valve."

Consider changing to "9) Make sure the air line valve located above the control box is open to the PK butterfly valve."

Not on a safety topic, but step #10 references recording the net weight in column H. Where is column H?

John Bodmann---02/04/2015 02:08:16 PM---Here is a first pass on changes to the Na Selexsorb batch sheet. Brian and I worked together on add

From: John Bodmann/BASF-CATALYSTS/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Jack Pettry/BASF-CATALYSTS/BASF@BASF

Date: 02/04/2015 02:08 PM

Subject: Na Selexsorb batch sheet modification

Here is a first pass on changes to the Na Selexsorb batch sheet. Brian and I worked together on adding safety info.

Please comment or recommend changes, else we can discuss tomorrow in the meeting.

Actual batch page Screenshot below, but here is the wording changed if you want to redline it:

5) Start PK blender rotation and pump about 1/2 of the solution needed (1/2 of Column E) from day tank to PK, at a rate of <u>7 lbs per minute</u>. Continue rotating blender for 20 minutes without solution.

6) Repeat Step 5 with remainder of the solution, except rotate blender an additional 5 minutes after all solution is added.
7) Make sure the Dust Collector is working properly, the ports are open, and the hose is connected to PK Blender.
8) Unload the PK Blender immediately. Pressure build-up will help with unloading.
*** Do NOT open top lid to relieve pressure on the blender as serious injury could occur ***
9) Make sure air line is open to PK butterfly valve. Open butterfly valve (Make sure arrow indicator is pointing upwards in open position).
If material does not discharge into bag immediately, close the valve and spin the PK for another 15 minutes, then try to discharge again.
*Vessel is under pressure - Do NOT open the top lid as serious injury could occur*
10) Unload the entire batch into one supersack. Obtain net wt (LB) and record in Column H. Sample each bag. Use shipping / finished goods label.
Bag Weights must be handwritten on labels prior to transporting to shipping.

# NA SELEXSORB INTERMEDIATE - "IMPREGNATION BATC

Product:	Na Selexsorb Intermediate	Article No.:	53237959
1) Check daytank level.	If there is less than 50-70 gallons of so	lution in the tank, ma	ake up fresh solution.  Refe
2) Charge P-K Blender	with one bag of CBV-100 Zeolite. From	the label, record info	o in Columns A-C.
3) In Column D, you mu	st convert net wt from KG to LB, by cald	culating 'KG' x 2.20	5. For exam <sub>‡</sub>

In Column E, calculate LBS OF SODIUM ACETATE SOLUTION FROM DAY TANK needed for PK batch =

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	ļ		Batch			Netwt	Convert to LB:	from dayta
Date	Shift	Operator	No.	Lot No.	Bag No.	(KG)	KG x 2.205	(LB)
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John	Bodr	nann	
Produ	ction	Engineer	r

Phone: 440-329-2540 Mobile: 440-452-2369 E-Mail: john.bodmann@basf.com Postal Address: BASF Corporation, 120 Pine Street, Elyria, OH 44035 USA

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From: Terrence M Vanderbosch/BASF-CATALYSTS/BASF

To: John Bodmann/BASF-CATALYSTS/BASF@BASF

Cc: Brian Beller/NA/BASF@BASF, Jack Pellry/BASF-CATALYSTS/BASF@BASF, Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Noemi Trent/BASF-

CATALYSTS/BASF@BASF, Robert Scoggins/NA/BASF@BASF

Date: 02/05/2015 12:48 AM

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From: John Bodmann/BASF-CATALYSTS/BASF

To: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, Brian Beller/NA/BASF@BASF, Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-

CATALYSTS/BASF@BASF, Noemi Trent/BASF-CATALYSTS/BASF@BASF, Jack Pettry/BASF-CATALYSTS/BASF@BASF

Date: 02/04/2015 02:08 PM

Subject: Na Selexsorb batch sheet modification

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Please comment or recommend changes, else we can discuss tomorrow in the meeting.

Actual batch page Screenshot below, but here is the wording changed if you want to redline it:

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4) In Column E, calcula	te <u>LBS OF SODIUM ACETATE SOLUTI</u>	ON FROM DAY TA	NK needed for PK batch =

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			PK	CBV-100 Zeolite (Article 53688086)				N a aceta
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Date	Shift	Operator	No.	Lot No.	Bag No.	(KG)	KG x 2.205	(LB)
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John Bodmann		
Production Engineer		

Phone: 440-329-2540 Mobile: 440-452-2369 E-Mail: john.bodmann@basf.com Postal Address: BASF Corporation, 120 Pine Street, Elyria, OH 44035 USA

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From: Justin Quach/NA/BASF

To: Robert Scoggins/NA/BASF@BASF, Terrence M Vanderbosch/BASF-CATALYSTS/BASF@BASF Cc: Leon Zavodnik/BASF-CATALYSTS/BASF@BASF, John Bodmann/BASF-CATALYSTS/BASF@BASF

Date: 10/31/2014 03:34 PM

Subject: Horn Machines/PK Blender Plans

## Guys,

Just to make sure we are on the same page, the Horn machines do not need to be manned any longer until we finish the run of Selexsorb on the PK Blender. Once the PK is finished it needs to be cleaned up so we can reblend the pillmix we already have made since the consistency seems to be poor. The pillmix hoppers do need to be drained of material though because DL Page will be doing a lot of projects to improve dust collection and such in the area probably next week. Maybe have Sexton work it Saturday or Sunday to get this accomplished? Thanks

Regards,

### **Justin Quach**

Process Engineer - Catalysts

Phone: 440-329-2501, Mobile: 440-822-9800, Fax: 440-329-2403, E-Mail: Justin.Quach@basf.com

Postal Address: Catalysts Division, BASF Corporation, 120 Pine St, Elyria, OH 44035

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